



A Weekly Journal of Pharmacy and the Drug-trade.

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COLONIAL TRADE.

If there is one thing more certain than another regarding the future export trade of the United Kingdom, it is that the population of our Empire beyond the seas will be our best customers. The national statistics prove this, the imperialistic spirit maintains it, and it behoves manufacturers and merchants to encourage it. The encouragement of colonial trade has been one of *THE CHEMIST AND DRUGGIST'S* strong points from the outset. Through our annual Colonial Issue we give an exceptional opportunity for advertisers to increase their business with the colonies. This issue will be on April 28, and, in addition to those who receive it weekly, it will be sent to all buyers of druggists' goods in India, Burma, Straits Settlements, South Africa, China, Japan, and the West Indies. The publisher will give any inquirer information regarding this important issue.

Summary.

NEW STORE-PRICES are quoted on p. 399

SHIP MEDICINE-CHEST SCALES have been slightly altered. See p. 401.

MR. LORD GIFFORD has delivered an election address at Blackburn (p. 414).

INSTRUCTIVE DISPENSING NOTES, by Mr. Harold Wyatt, jun., are printed on p. 412.

IN TWENTY YEARS our business with the U.S.A. has amounted to 4,192,000,000l. (p. 419).

BOOTS (LIMITED) have changed their title to "Boots Cash Chemists (Eastern), Limited" (p. 424).

SOME BRITISH EXHIBITS which are going to the Paris Exhibition are briefly mentioned on p. 431.

MR. T. R. DALLMEYER is the new President of the Royal Photographic Society. His portrait is given on p. 433.

DR. JOWETT has communicated to the Chemical Society a study of jaborandi and its alkalies, and shows that jaborine does not exist (p. 410).

PHARMACEUTICS is one of the subjects recognised by the reconstituted London University, Mr. H. C. Greenish being the first and only professor of it (p. 423).

THE VIAMI REMEDIES have figured at a coroner's inquest, and the jury expressed an adverse opinion regarding the manner in which they are pushed (p. 400).

THE CHEMISTRY of sandalwood oil has received a further contribution from a French chemist, and this enables us to give a *résumé* of the whole subject (p. 421).

IN THE ARTICLE ON BOER PHYSICS particulars are given of some of the medicines used by Boers in South Africa and regarding travelling chemists in the Transvaal (p. 432).

THE TERCENTENARY of the Faculty of Physicians and Surgeons, Glasgow, has been celebrated by a *conversazione* and exhibition of medicinal specialities, described on p. 441.

A LONG REPORT of adulteration prosecutions at Cape Town, in respect to medicines, is printed on p. 425. One summons was dismissed on the ground that the B.P., 1898, is still in force out there.

OUR TOWN TRAVELLER describes, with illustrations, Bovril's new premises in Old Street, E.C., and gives particulars of Messrs. Salmon, Ody & Co.'s old house in the Strand which is being pulled down (p. 434).

THE BUDGET imposes an additional 6d. per proof gal. on spirits (p. 424), and this has altered the price of many medicines (p. 404). A proposed shilling stamp on produce contracts is strongly resented by Mincing Lane (p. 421 and p. 447).

IT HAS BEEN SUCCESSFULLY CONTENDED that sweet spirit of nitre is a perishable article, and a summons under the Sale of Food and Drugs Act, in which the analyst did not specify the fact on his certificate, has been dismissed (p. 423).

THE MANX LEGISLATIVE COUNCIL has disagreed with the House of Keys respecting the company pharmacy clause and the poison schedule. On Tuesday a conference between the Council and Keys resulted in a new company clause being adopted (p. 418).

OUR WAR NOTES this week contain several portraits of chemists who are either combatants or who have been affected by the war. A military compounder sends us his opinion of the volunteers in that department and some notes on the work in it (p. 439).

No PROGRESS has been made with the Companies Bill (p. 424). We print the gist of the Federation Circular, and an abstract of one prepared by Mr. Jesse Boot, a letter from a M.P. who has been a drug-store director, and various notes showing the interest in the measure (p. 416). The Pharmaceutical Council decided on Wednesday to oppose the pharmacy clause of the Bill, and defeated the motion to have the clause amended rather than deleted (p. 409).

English News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Glamorganshire Drugs.

The report of Mr. C. A. Seyler, B.Sc., F.I.C., analyst to the Glamorgan County Council, shows that out of a considerable number of samples of drugs examined during the past quarter only one was deficient. This was a sample of aromatic spirit of ammonia, which was found to be 33 per cent. deficient in ammonia. The report goes on to state that there is a distinct improvement in the quality of the samples of camphorated oil, all being found of the required camphor-strength and made with olive oil. The bulk of milk of sulphur samples no longer contain sulphate of lime, and of two samples of sweet spirit of nitre one was found to be very slightly under the standard. The drug-samples, besides those already mentioned, included compound tincture of benzoin, tincture of belladonna, oil of turpentine, belladonna plaster, tartaric acid, cream of tartar, tincture of rhubarb, and black draught. Amongst other commodities, one sample of olive contained 30 per cent. of arachis oil, and one of golden syrup contained 80 per cent. of syrup glucose.

Analysts' Affairs.

At a meeting of the Blackburn Town Council on March 1 a communication was received from the Local Government Board withholding their consent to the proposed termination of the services of Dr. Williams as borough analyst, and to the appointment of Dr. Pickard in his stead. The Town Clerk announced that Dr. Williams had declined to retire from the office of analyst, and eventually the whole matter was referred back to a sub-committee.

At a meeting of the Reading Town Council on March 1 it was reported by a committee that it was not desirable to make any fundamental alterations of the existing arrangements under the new Sale of Food and Drugs Act with Dr. Ashby, borough analyst. Dr. Ashby had suggested that his salary should be 30% per annum, including remuneration for analyses at the rate of one sample per 1,000 of the population up to the limit of the figures arrived at by the census of 1901, and that beyond that limit a fee of 10s. 6d. should be paid for each analysis. These recommendations were adopted, and Dr. Ashby was also appointed Medical Officer of Health.

Salt-exports Decrease.

The official returns issued this week of salt-shipsments from Mersey ports during the past month show that it was the worst February in the last decade. Shipments reached 24,884 tons, against 31,000 last year, an average of 37,287 for the last ten years.

A New Chemical-works.

The erection of new chemical-works at Cliford Bridge, near Middlewich, has been commenced by the Electrolytic Alkali Company, of St. Helens. The total cost will be 100,000%.

A Good Example.

At the quarterly meeting of the Technical Instruction Committee of the East Suffolk County Council it was resolved to make a grant not to exceed 50%, being half the cost, for a chemical laboratory at Eye Grammar School.

Disinfectants in St. Luke's.

At a meeting of the St. Luke's Vestry on March 6, tenders were submitted for the supply of disinfectants to the parish for the next six months. Mr. Berliner said there was a vast discrepancy in the prices, and hoped that due supervision was used when the goods were delivered. The Medical Officer (Dr. Yarrow) said a sample from every delivery was analysed. The Clerk read out the tenders as follows:—

Tuson's Disinfectant Company (Limited), Stratford, E., 1s. 4d. per gal. for commercial liquid carbolic acid; 2s. 6d. per cwt. for

carbolic powder; 5s. per gross for 1-lb. packets of carbolic powder; and 4s. per gal. for best quality Sanitas, crude, in 18-gal. casks.

Jeyes' Sanitary Compound Company (Limited), Cannon Street E.C., 1s. 6d., 4s. 6d., 7s. 6d. (Sanitas not tendered for).

The Sanitas Company (Limited), Bethnal Green, 1s. 0½d., 2s. 9d., 5s., and 3s. 6d.

Geo. Mayor & Co., Love Lane, Southwark, S.E., 1s. 4½d., 3s. 6d., 6s. 6d. (Sanitas not included).

"Red Cross" Chemical Company, Hull, 1s. 6d., 4s. 6d., 12s. 6d., and 6s.

Adcock, Easton & Co., Finsbury Park, N., 1s. 4d., 3s. 9d., 7s. 6d. (Sanitas not in the tender).

George Armstrong & Co. (Limited), Cubitt Town, Isle of Dogs, 1s. 5d., 2s. 7½d., 5s. 6d. (no Sanitas).

Mr. Berliner repeated his remark as to the marked difference in the prices, and Mr. William Howes moved that the Sanitas Company have the tender. This was seconded by Mr. Eade, but Mr. Boyce thought it curious that the Vestry should sell the disinfectant people the powder from their dust-destroyer, and then buy it back again as carbolic powder. Mr. Geo. Eade said every precaution was taken to ensure a good article, and, even though the prices of the Sanitas Company were so far below the others, he, as a bit of an expert in such matters, was of opinion that it was quite possible to supply a good article at the price; and if anybody could do it the Sanitas people could. Mr. Pond remarked that there was no doubt the Sanitas Company could supply these goods as they are specialists in the matter of disinfectants. The motion was adopted.

A Flourishing Association.

At the annual meeting of the Grantham Traders' Association, held last week, Alderman A. G. Gamble, chemist and druggist, Grantham, was again elected President. The Secretary reported that the Association was in a thriving condition as regards members, and had a good balance on the right side. During the past year the Association has recovered 1,000l. worth of debts for its members.

Viavi Remedies.

An adjourned inquiry was held at Eastbourne on March 1 with reference to the death of Elizabeth Mary Lake, wife of a clerk, which occurred suddenly on February 25. It transpired that deceased had been using the remedies of the Viavi Company, having received from Miss O'Dowda, the Eastbourne agent for the company, several remedies, including syrup of Jamaica ginger, some tablets, Viavi liquid, and lime-water. Miss O'Dowda stated in her evidence that she held no medical qualification, and that she did not know the ingredients of which the Viavi remedies were composed. She denied that she had ever given deceased medical advice. The deceased had, she said, communicated with the hygienic department of the company upon a form issued for that purpose with each of the company's remedies, but she was not aware of the reply received. The remedies of the company were uniformly priced 36s. each. Mr. Lake said his wife, who was averse to consulting a medical man, had supposed herself to be suffering from a tumorous condition of the intestines and from indigestion. Mr. Harper, medical practitioner at Eastbourne, who had made a *post-mortem* examination, testified that death was due to an ulcer in the upper part of the intestines. He did not think the deceased's condition could have been accurately diagnosed, though the presence of the ulcer would probably have been suspected. Dr. Woodward, who said he held his medical qualification from the University of Pennsylvania, stated that he was the overseer of the medical department of the company. He submitted a circular letter of instructions issued by the company to their agents warning them against offering advice or diagnosing or otherwise infringing the law; and, further, said that he knew of no correspondence between Mrs. Lake and the company. He knew nothing of a letter dated May last produced. His connection with the company began after that date. It was a limited-liability company, having been incorporated since he became connected with it. The jury returned a verdict of death from natural causes. They thought, however, that the life of the patient might have been prolonged had the deceased been placed under qualified medical treatment; and from the evidence brought before them they considered the Viavi Company a fraud. The Coroner expressed his agreement with the verdict.

The Staff Exonerated.

At an inquest held on March 2 on Michael Bernard Rowley, a screw-maker, aged 20, who died in Beckett Street Fever Hospital, Leeds, it was stated that the assistant medical officer gave instructions that if Rowley got no better he was to be given 3 dr. of a preparation containing strychnine. Instead of a weak solution, however, a strong preparation, intended for hypodermic injections, was administered, and Rowley died from strychnine-poisoning. The verdict was death from misadventure, and the staff were exonerated from all blame.

Ships' Medicine-chests.

The Marine Department of the Board of Trade have issued this week revised medical scales for merchant and passenger ships. We find, however, on comparison with the scales published in our current DIARY, that the alterations are but slight. They are as follows:—

The quantity of linseed meal (twelve months' supply) to be carried on merchant ships where the number of the crew is ten and under has been reduced to 7 lbs. (formerly 14 lbs.). Where the crew number twenty-one to forty men the quantity has been reduced to 20 lbs. (formerly 28 lbs.). It is now necessary for North Atlantic passenger ships, on voyages not exceeding thirty-seven days, to carry a 2-gal. Pasteur-Chamberland filter, or other approved filter of like capacity, capable of delivering water free from micro-organisms. The surveyors will require all filters to be tested at the Government laboratory. Only one ether-inhaler is now required (formerly two) for ships carrying 750 passengers and upwards.

Charge of Embezzlement.

At the Leeds Police Court on March 5, William Walter Abbott, assistant, employed in the Boar Lane shop of Taylor's Drug Company (Limited), Leeds, was charged with having embezzled the moneys of his employers. The allegation was that the young man sold a washleather for 1s. 7½d., and only accounted for 7½d. When taxed with the offence it was alleged that Abbott turned 6s. 6d. out of his pockets, which he said he had received that day and had not accounted for. A remand for a week was ordered.

Inter-Pharmacy Football League.

The following table gives the relative positions of the clubs composing the League competition up to date, by which it will be seen that a win counts two points "for" and a defeat two points "against" each team:—

Team	Matches Played	Won	Lost	Points	
				For	Against
Square... ..	6	5	1	10	2
Metropolitan College ...	5	4	1	8	2
London College ...	6	2	4	4	8
Muter's ...	5	0	5	0	10

Honours are still easy between the Square and the Metropolitan College, and an interesting final stage may be looked for.

A return match, in connection with the Pharmacy Students' Football League, between the Metropolitan College of Pharmacy and the London College teams was played at Wormholt Farm, Shepherd's Bush, on Saturday, March 3. The game resulted in an easy win for the Metropolitan College by eight goals to one.

Store-prices.

The following prices are noted in the Army and Navy Stores' circular for March:—

Advanced.—Camphor, 2s. 4d. per lb.; in 1-oz. tablets, 2s. 6d. per lb.

Added.—Seabury's improved corn-plasters, 7d. per tin; Spiritine (solidified methylated spirit), 2s. 9d. per doz. tins; double tins, with holder, 10½d. each; Sparklet bottle, with toggle, 5s. each; violet amulets, 5d. each; Welda, 5d. per tube; Selvyt covers for hot-water bottles, 1s. each; perfumed flowers, from 11d. each for rose bud buttonholes to 4s. 2d. each for dress sprays.

Fire.

The British Surgical Rubber-works in Junction Street, Canning Town, E., were partly destroyed by fire on March 3. Flames burst out in a range of buildings used as manufactory and stores, and, in spite of the efforts of the Metropolitan and West Ham fire-brigades, the premises were much damaged.

Five Grains a Fatal Dose!

An actor named Albert Victor Siddons, being disappointed at the results of a performance at Hitchin, took some bichloride of mercury and then sent for a doctor. He told the doctor that he had only taken ½ dr. of the poison, and he lingered for six days and died on February 28. At the inquest on the following day Dr. Shillitoe stated that 5 gr. of bichloride of mercury was a fatal dose.

Various Poisonings.

A young woman named Rose Blanche Schofield, living at Batley, swallowed a quantity of ammonia on March 4, and died next morning.

James Buckley, an aged employé of the Manchester Gasworks, drank a quantity of carbolic acid one day last week, and died five minutes afterwards.

An inquest was held at Halifax on March 3 on the body of Sophia Mackrell, wife of an engineer, who died from strychnine-poisoning. Deceased had been in ill-health for some time, and had evidently taken some rat-poison, as two empty vermin-killer packets were found on her bed.

John Griffiths Hazlitt, a pianoforte-tuner, of Bury, obtained from a chemist's shop ½ oz. of prussic acid in a properly labelled bottle, to be used, as he said, for killing a dog. He went into a public-house, ordered a brandy-and-soda, added the poison, and swallowed the lot, falling dead almost immediately afterwards.

On March 1 Sophia Mitchell (33), of Heaton Norris, committed suicide with Harrison's vermin-killer, which she obtained at the shop of Mr. W. Dodge, chemist and druggist. At the inquest Mr. Dodge said his assistant told him the deceased had obtained 2d. of vermin-killer. Witness inspected the poisons-book, and saw that the sale had been registered in the name of "Mrs. Mitchell." His assistant was not qualified. He thought the poison in the powder was strychnine. The usual verdict was returned.

Remanded.

Wm. Sidney Davorn, who is said to have been going about the country describing himself as a dispenser of medicines, and calling upon doctors for assistance to help him to go out to South Africa, was brought before the Crewe Magistrates last week, and charged with fraud. A Crewe doctor gave Davorn a prescription to make up, but he failed to do it. He was remanded for a week.

Messrs. Cook & Co.'s Cricketers Dine.

The members of the cricket club in connection with the East London Soapworks (Messrs. Ed. Cook & Co., Limited), Bow, dined together at the Holborn Restaurant on March 3, and, although the air in and about that famous hotel was distinctly militant on that evening, Cook's cricketers sat unmoved, and calmly discussed—first, the tempting viands provided for their delectation, then the success of last season's matches (13 played, 9 won, 3 lost, 1 drawn), and then, again, the hopes and good intentions for the future. The genial President (Mr. T. A. Cook) occupied the chair (supported by Messrs. J. Cook, J.P., Godfrey Hall, and C. R. Cook), and, in complimenting the club on a very satisfactory season, said he believed there was a big future for it, both in a social and a sporting sense, and he and his co-directors would in every way encourage and help it to become, as he believed it would, a factor in the works. Men who played well together in the field would work well together in the factory. Mr. H. V. Lovejoy had won the prize for "best all-round play"—(cheers)—the other prize-winners being Mr. J. Chapman (captain), 1st batting, Mr. H. Tinkham, 1st bowling, and Mr. G. A. Priance, 2nd bowling. The Chairman's remarks were received with enthusiasm, and responded to by the

captain (Mr. J. Chapman). In the course of the evening the Chairman proposed a toast for "The Heroic Defenders of Ladysmith, Kimberley, and Mafeking," coupling with it all our soldiers at the front. The sentiment was received with loud cheers, and a collection was started to send out hospital-comforts to the men who had gone from the factory to the war. Songs—patriotic, topical, sentimental, and humorous—with recitations and instrumental solos, were ably rendered by Messrs. W. L. Jode, Chapman, Briance, Alec Meade, Attwell, Catt, Waller, Jessop, Firman, and Blair during the evening.

Irish News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Business Change.

Messrs. Hugh Moore & Alexanders (Limited), Dublin, have purchased the business of Fred Lewis & Co., perfumers and toilet-soap makers, Fleet Street.

April Preliminary Examination.

Applications for this examination, accompanied with birth certificates and bank receipts, must be lodged with the Registrar, not later than 11 o'clock A.M. on March 20.

A Reunion.

Last week the employes of Messrs. A. & R. Thwaites & Co. chemists and mineral-water manufacturers, Dublin, held their annual reunion. An enjoyable evening was spent.

Reduced Terms.

Sir Charles Cameron, Dublin, has written to the Fermanagh County Council offering to do the entire analytical work of the county for 40%, instead of 60% a year. As a result it is proposed to rescind the appointment of analyst of Mr. Barklie, of Belfast.

Personal.

Mr. George A. Stritch, L.A.H. Dublin, has been appointed medical officer to the South Earl Street Dispensary in that city.

Mr. Robert Gardner, Dame Street, Dublin, has been appointed liquidator of the Dublin Mineral Water Manufacturers' Association (Limited).

Fires.

Askeaton Mills, Limerick, recently taken for the manufacture of carbide of calcium, has been totally destroyed by fire. The owner claims 2,000% under the Malicious Injuries Act.

The premises of Mr. Garty, L.P.S.I., Charleville, co. Cork, have been burned to the ground. The lives of Mr. Garty and his wife were saved by their jumping from the second floor into the street. The floor of the room they left fell in about five minutes afterwards. The origin of the fire is unknown.

Drunk on Methylated Spirit.

During the hearing of an assault case in the Dublin Police Court last week, it was stated that all the parties concerned had intoxicated themselves by drinking methylated spirit, which they had procured from a local druggist. The Magistrate said it was a dreadful state of the law that permitted an article such as methylated spirit to be sold without restriction, and hoped notice would be taken of the matter by the proper authorities.

Mr. McBride not a Chemist.

A correspondent informs us that the gentleman who was an unsuccessful candidate for Parliamentary honours last week—honours which he could not have held, seeing that he is fighting for the South African Republic—was never a chemist. When our correspondent was in Messrs. Hugh Moore & Co.'s drug-department McBride came to the house from his mother's shop in Westport (co. Mayo), which is a grocer's, and he was put into the sundry-department, the

stock kept there consisting only of grocery goods, such as coffee, biscuits, confectionery, tinned meats, &c. He never served an hour to the drug-trade, and in our correspondent's opinion he would not know "the difference between Epsom salts and powdered opium."

Scotch News.

Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Public Notices.

All claims against the estate of the late Mr. Alex. Noble, analytical chemist, 31 Annette Street, Glasgow, should be forwarded to Messrs. Newlands & Warner, 135 St. Vincent Street, Glasgow.

All claims against the trust estate of Mr. Keith Mackie, chemist and druggist, Whithorn, must be lodged with Mr. W. C. Laurie, law-agent, Whithorn, by March 13, as the trustee is about to divide the estate among the creditors.

It is announced that the business of the late Mr. John Cumnock, manufacturing chemist, 45 Ropework Lane, Glasgow, has been sold to Mrs. Cumnock, who will continue to carry on the concern under the same name, and pay all debts incurred since February 18.

Personal.

The War Office has asked for medical student Volunteers from the Universities of Glasgow, Edinburgh, St. Andrews, and Aberdeen. A large number of Glasgow students have already sent in their names.

Councillor Richard Clark (Raines, Clark & Co., wholesale druggists, Edinburgh) presided at a successful smoking-concert in connection with the St. Stephen's Ward Conservative Association, held in the Royal Hotel, Princes Street, Edinburgh, on March 1.

French News.

(From our Paris Correspondent.)

THE PHARMACIE CENTRALE DE FRANCE held its annual general meeting on February 24, Mr. Charles Buchet (the managing director) presiding. A dividend was declared of 5 per cent. per annum as the profit for the year on the ordinary shares.

THE ANTI-ALCOHOL VACCINE is said by a French writer, whose opinion on scientific subjects carries some weight, to produce the desired transformation on inveterate alcohol-maniacs. All who have been experimented upon, he states, quickly bud into small saints, of exemplary sobriety, who detest absinthe, brandy, and other spirits by which they were originally led astray.

FRENCH WOMEN'S INVENTIONS.—Dr. A. de Neuville has set himself the pleasant task of studying the inventive genius in women. In referring to the patents taken out by the fair sex in America and France, he forms the opinion that the latter have a tendency to the ideal rather than the practical. The following are a few specimens:—Mlle. Auerbach has applied the water-cart idea to a comb for the purpose of applying brilliantine, perfume, or any other liquid to the hair. The comb has the advantage of giving an equal distribution, while at the same time facilitating coiffeur's or lady's-maid's work. Mlle. Koller is a devotee of smoking, and to render it more agreeable she has patented a cigarette-paper made of compressed rose-leaves. Mme. Gronwald has introduced an aromatic toothpick as an antiseptic for the teeth after meals. Mme. Fritsche has brought out a small galvanised chain as a preventive for infectious diseases. Mme. Schefer's imagination has suggested a special medicated ball for massage and frictions. Other inventions of a varied nature comprise writing-machines, ladies' dress, flying-machines, and many other beyond the ken of ordinary imaginations.

Colonial and Foreign News.

A SANITARY CONFERENCE will shortly take place in Rome, the subjects to be discussed being quarantine, preventive measures against the bubonic plague and other contagious diseases, and the commerce in medical specialties, mineral waters, and pharmaceutical products.

PATENT MEDICINES IN SERBIA.—The sale of patent medicines and made-up drugs is now regulated by the internal sanitary laws of Serbia, which require an official analysis and licence. The Servian Government also claim the right to fix the price of all patent medicines sold in the country.

SPANISH PHARMACISTS are complaining of the military pharmacies supplying also the families of military persons with drugs. The four military pharmacies in Madrid make up a large number of prescriptions, and to this is attributed the closing-up of thirty-three pharmacies within the past ten years in Madrid.

FAILURES IN THE UNITED STATES.—During 1899 thirty-eight manufacturers of chemicals, drugs, and paints failed in the United States, with total liabilities amounting to \$1,103,297. During 1898 there were sixty-eight failures, with liabilities aggregating \$2,833,256. Of dealers in drugs and paints 330 failed last year, with liabilities of \$1,839,945, against 433 failures during 1898 and liabilities of \$1,826,759.

PHARMACISTS AND DRUGGISTS.—The pharmacists of the Brianza (Italy) are going for druggists who try to poach on their preserves. They have induced the Government to declare that only pharmacists are allowed to sell drugs in doses or in the form of a medicament. Accordingly druggists may not now sell many pharmaceutical goods, and not less than 200 grammes of such articles as castor oil, or not less than 1 kilo. of cod-liver oil.

PLATINUM IN RUSSIA.—The yield of platinum in the Ural district in 1899 was 380 pounds as against 364 in 1898 (1 pound = 33 lbs.). The platinum-bearings belonging to Count Schouvaloff yielded a third of the whole production, the works of the Prince de Donato supplying 70 pounds, while a foreign joint-stock company produced from 100 to 120 pounds. Owing to the greatly-increased price of platinum additional operations are being undertaken in the platinum-bearing soils.

PROTECTION OF BRITISH TRADE-MARKS.—A case of considerable interest to British merchants has been heard in the Japanese Law Courts. Three Japanese conspired to counterfeit the "Kingsfisher" trade-mark of Messrs. Wills, the tobacco-manufacturers. The forging of labels was entrusted to one of the trio, and the making of boxes to another. Some thousands of boxes filled with inferior tobacco were manufactured and sold in the autumn. On the facts coming to the knowledge of Messrs. Wills, a complaint was made, and the three accused were convicted and suitably fined. A point to be noted by British manufacturers is that in prosecutions of this kind it is incumbent on a plaintiff to prove "knowledge" on the defendant's part of the fact of the Japanese registration of the trade-mark.

CANADIAN TRADE.—The High Commissioner of Canada has sent us a report on the trade and commerce of Canada for November, 1899, from which we take certain particulars of interest to the drug-trade. During the month named drugs and medicines were imported to the value of \$170,646, against \$145,800 in November, 1898. For the five months ending November 30 the imports of these were \$749,491, against \$725,151 in the corresponding five months of 1898. The quantity of soap imported in November was \$69,493, against \$32,046; and in the five months ending November 30, 1899, \$219,591, against \$158,179 in the corresponding period of 1898. These were dutiable goods. In the free-list dyes, chemicals, &c., figure among the imports to the extent of \$276,139, against \$239,434 in November, 1898, and \$937,116 for the five months ending November 30, against \$1,048,882 for the corresponding period of 1898. Alkali to the value of \$44,423 (50,831 cwt.) was exported from Great Britain to Canada during November, 1899,

against \$31,132 (27,469 cwt.) in 1898; for the five months ending November 30 the imports were \$125,180 (135,109 cwt.), against \$135,504 (112,384 cwt.) in 1898.

EARLY-CLOSING IN NEW SOUTH WALES.—The new Early-closing Bill, as was to be expected, is causing a slight amount of friction in respect to its general working, and the somewhat erroneous idea has gained currency amongst some of the shopkeepers, that because the Government provide for certain anomalies in the working of the Act, each particular shopkeeper may set aside the provisions of the Act as regards his own particular case. A correspondent, writing to the *Sydney Telegraph*, intimates that he is the proprietor of two chemists' shops. At one he employs a manager who gets a day in a fortnight as a holiday, and he wishes to know if under the new Act he will be required to alter this to half a day in each week. He also asks if he will be allowed to sell after 6 o'clock such articles as "perfumes, soaps, toothbrushes, tooth-powder, methylated spirit, &c., or must he erect a partition in his shop?" It will be remembered that the Act permits keeping open till 9 P.M. on five days and 11 P.M. on one day in each week, but that no chemist shall be liable to a fine if he attends to sales of drugs for medical purposes or surgical instruments, or patent and proprietary medicines after hours. The Editor of our contemporary, replying to the question, intimates that it will be unnecessary for the chemist to partition off the goods he enumerates, as such goods form part of the chemists' ordinary stock-in-trade. Of course if a chemist were to lay in a stock of ordinary household soap, and in that way interfere with the grocers' trade after 6 P.M., he would be considered as evading the Act; but so long as he plies his business as a *bona-fide* chemist, he will be at liberty to open his shop till 9 o'clock, after which hour he can only dispense prescriptions. To allow an employé one day's holiday a fortnight instead of half a day a week would be a contravention of the Act.

Personalities.

PROFESSOR EMIL FISCHER, of Berlin, has been elected a member of the French Academy of Sciences.

MR. HENRY PECHEY, chemist, of 27 Camperdown, Yarmouth, has been elected as one of the borough auditors to the corporation.

MR. DORKINS, dispenser at the Poplar and Stepney Sick Asylum, has taken a dispensership in connection with the Imperial Yeomanry. The managers of the Asylum have declined to keep his place open.

MR. HUGH ROBERT MILL, D.Sc., the librarian to the Geographical Society, who is getting the St. Andrews LL.D. degree, was chemist and physicist to the Scottish Marine Station about fourteen years ago.

MR. J. GREEN, chemist and druggist, of Peterborough, who for some time past has been manager of the business of the late Mr. Appleby, of Retford, proceeds to South Africa with the Imperial Yeomanry this week. Mr. Green was a former student of the Manchester College of Pharmacy.

COUNCILLORS T. BREWIS AND F. G. FOSTER, both chemists in Portsmouth, formed part of a "flying squadron" appointed by the Portsmouth Town Council to visit several towns and inspect the technical institutes, with the view to Portsmouth finally selecting one suitable for the town's use.

MR. A. F. MCADAM, who has for fourteen years been the representative in Ireland for Messrs. G. Walker & Son, Glasgow, intends giving up the "road" at an early date. We understand that Mr. McAdam will take over the management of the Wavreley Hotel, 36 Loch Promenade, Douglas, Isle of Man.

MR. WILLIAM CHARLES BAILEY, of 18 Linden Grove, Peckham Rye, S.E. (one of the representatives of Messrs. James Townsend & Son, medical-label printers, of Exeter and London), recently celebrated the coming of age of his son by a convivial gathering, at which nearly fifty guests were present. The most noteworthy features of the entertainment were cinematograph and gramophone exhibitions by the Prosser-Roberts Company, of Camberwell, S.E.

Excise and Customs.

EXPORT OF TINCTURES AND MEDICINAL SPIRITS.—The Inland Revenue Department has paid drawback on 80,604 proof gals. of spirit contained in the various tinctures, essences, perfumes, and medicinal spirits exported during the year 1899—an increase of 6,020 gals. over the quantity exported in 1893 and 15,882 over 1897. This steady and continuous increase is very satisfactory, and must be gratifying to those members of the trade who induced the Excise to grant the original concession, and by constant pressure have been able to prevail on that department to extend and simplify the arrangements.

THE NEW SPIRIT-DUTY has been followed promptly by increases in wholesale prices. On March 6 Messrs. C. R. Harker, Stagg & Morgan issued the following circular:—

In consequence of the imposition of an additional duty of 6d. per gal. on proof spirit of wine we are compelled to raise our prices for all preparations which we manufacture containing spirit or by its aid. On and after this date our prices will be advanced as follows:—

Rectified spirit	... ..	1s. per gal.
Alcohol absolute	... ..	2d. per lb.
Æther pur.	... ..	3d. "
Æther acetic	... ..	2d. "
Chloral hydras...	... ..	3d. "
Chloroform pur.	... ..	3d. "
Decocta and liquors	... ..	1d. "
Extracts liquid	... ..	2d. "
Infusions	... ..	1d. "
Perfumes	... ..	3d. "
Spiritus æther. nit.	... ..	2d. "
Spiritus ammon. arom., B.P.	... ..	2d. "
Tincturæ—Rectified spirit	... ..	2d. "
Tincturæ—60-per-cent. alcohol and lower strengths	... ..	1d. "

The price of all other preparations containing alcohol will be advanced in similar proportion.

Manufacturers of ethers have also raised their prices.

IN REGARD TO CONTRACTS for spirits, it is important to note that by the Customs Laws Consolidation Act, in the event of any increase, decrease, or repeal of duties of Customs chargeable upon any goods or commodities after the making of any contract or agreement for the sale or delivery of such goods duty-paid, it shall be lawful for the seller, in case such increase shall accrue before the clearance and delivery from the warehouse of such goods at such increased duty, and after payment thereof, to add so much money to the contract-price as will be equivalent to such increase of duty, and he shall be entitled to be paid and to sue for and recover the same; and it shall be lawful for the purchaser under any such contract or agreement, in case such decrease or repeal shall take effect before the clearance and delivery from the warehouse at such decreased duty, or free of duty, as the case may be, to deduct so much money from the contract-price as will be equivalent to such decrease of duty or repealed duty, and he shall not be liable to pay or be sued for or in respect of such deduction.

We are indebted to the *Wine Trade Review* for this useful reminder.

THE PRODUCE-TAX.—Hurriedly-summoned meetings of merchants and brokers were held at the London Chamber of Commerce on Tuesday and Wednesday, and a deputation was appointed to present to the Chancellor of the Exchequer a very numerous-signed memorial, asking for information as to the scope of the new tax and that the memorialists might be heard before any final decision is given. There appears to be some doubt as to the precise wording of the Sir M. Hicks-Beach's resolution—it is as follows:—

That there shall be charged upon a note signed by any person carrying on the business of a broker to his principal advising him of the sale or purchase of any goods, wares, or merchandise, the following stamp duty: If the goods, wares, or merchandise are of the value of 5*l.*, and under the value of 100*l.*, 1*d.*; of the value of 100*l.* or upwards, 1*s.*

This memorial was placed in the hands of the Chancellor of the Exchequer by Sir Albert Rollit, M.P. At the meeting on Wednesday it was intimated that the Chancellor of the Exchequer had agreed to receive a deputation next week, and ten representative brokers and merchants were selected for this purpose. Mr. H. W. Price (Messrs. Price, Hickman & Co.) and Mr. Andrew Devitt are to represent the Mixing Lane drug-trade.

Trade Notes.

MESSRS. W. B. FORDHAM & SONS (LIMITED), York Road, King's Cross, N., ask us to state that the price of "Melba Hair-wavers" advertised in our issue of February 24 given as 2*s.* should have been 3*s.* per doz.

MESSRS. G. B. KENT & SONS, 75 Farringdon Street, E.C., send us a copy of their special toothbrush catalogue. The list gives some idea of the extent of the firm's business, and the enormous variety of toothbrushes there are on the market. A useful page is devoted to directions for the use of toothbrushes and other valuable hints.

MESSRS. J. L. HATRICK & Co. (LIMITED), of 82 Turnmill Street, E.C., are making a special line of supplies for ships' medicine-chests as required by the new regulations of the Board of Trade. They will forward a price-list to anyone interested on application. They also have a special series of American bottles in various sizes.

ENGLISH SELTZOGENES.—**MESSRS. Idris & Co. (Limited)** 5 Pratt Street, Camden Town, N.W., have added the making of seltzogenes to their already extensive business. The firm claim that their syphon and seltzogene factory is the largest of the kind in England, and that they have a large connection with provincial and export houses. Full particulars of this new departure will be found by reference to our advertisement pages.

TRADE INQUIRIES.—The Canadian Government Offices Victoria Street, S.W., have had an inquiry from an important London firm of manufacturers of lubricants who desire to enter into communication with Canadian importers of solidified lubricant, petroleum-jelly, oils, greases, &c. Inquiry is also made for the names of Canadian manufacturers of paraffin-wax and exporters of graphite, crude oils, asbestos-fibre, asbestos, soapstone, mica, and other mineral substances.

PALATINOIDS.—We find the following commendatory remarks on Messrs. Oppenheimer's preparations in the medical section of the Notes and Queries column of the *London Echo*:—"I wish to say a word about this form of medicament, as I daily get letters about them, which latter are becoming so numerous and so repetitious that I almost repent having ever mentioned them, and I should do so were I not convinced that they are for many cases the most perfect pharmaceutical preparations we have."

"**NOTES ON PEPSINE**" is a leaflet issued by Messrs. Baiss Brothers & Stevenson, Jewry Street, E.C., which announces that they have succeeded in preparing under strictly aseptic conditions a concentrated pepsin which fulfils all the British Pharmacopœia requirements. From an examination of this product we find it to possess the additional advantage of being non-hygroscopic, and therefore specially suitable for powders. The firm are also offering "Zylothin," a zinc-white which is more permanent in colour than white-lead and zinc oxide.

THE LATEST "SOLOID."—Messrs. Burroughs, Wellcome & Co., Snow Hill Buildings, E.C., send us specimens of "soloid" protargol, 4 gr., one of which, dissolved in an ounce of distilled water, makes approximately a 1-per-cent. solution. The "soloids" are readily soluble in water, and this silver proteid compound, with its unirritating properties, is gaining recognition as a valuable astringent antiseptic and bactericide. The "soloid" is a useful and reliable form for the preparation of solutions, and two sizes—1 gr. and 4 gr. respectively—are sent out in bottles containing 100 in each.

MESSRS. LINTON, HUBBARD & ANDREW, of 27 Leadenhall Street, E.C., have sent us a sample of Peder Devold's new season's Lofoten cod-liver oil, with the statement that it is practically the first parcel of genuine Lofoten oil which has arrived in London this season, earlier consignments this year having been from other districts than Lofoten. The sample which we have received has been drawn from bulk at the wharf and is very bright and limpid. It is extremely palatable, being almost odourless, with very little taste and it fully bears out the reputation which this well-known brand of oil holds in this country.

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

WEDNESDAY'S meeting was a long one, two-thirds of the time being taken up with a discussion on the company-pharmacy question. The matter arose out of a recommendation of the Law and Parliamentary Committee to oppose Clause 2 of the Companies Bill. Mr. Walter Hills proposed an amendment that the Watch Committee be instructed to secure an amendment of Clause 2 in the direction of reserving titles and regulating company-pharmacy to their satisfaction, failing which they be instructed to oppose the whole clause. The amendment was only supported by six councillors, and was therefore lost. The original motion was subsequently carried. Mr. Hills getting an assurance from the President that any amendments would be submitted to the Council. It was announced that Mr. Charles Maw had given 100 guineas to the Benevolent Fund, and that donations of twenty-five guineas and ten guineas had come to hand from the Chemists' Ball and Pharmacy Club respectively. The date of the annual meeting was fixed for May 16. The scheme drawn up by the committee for the administration of the Waterall legacy was approved of. The regulations of the new University of London were brought to the notice of the Council by Mr. Carteighe, who attributed the expression "professor of pharmaceutics" which occurs in it to Sir Michael Foster. The Vice-President brought up his scheme for a rearrangement of the districts of the local secretaries but, coming at the end of the company-pharmacy discussion, the Councillors were not much in the mind for discussing it. The matter was referred to the General Purposes Committee to deal with.

The Council met on March 7, there were present, the President (Mr. W. Martindale), the Vice-President (Mr. Newsholme), the Treasurer (Mr. Atkins), and Messrs. Allen, Bateson, Carteighe, Corder, Cross, Glyn-Jones, Harrington, Harrison, Hills, Johnstone, Park, Savory, Southall, Storrar, Symes, and Warren. After the minutes had been signed, the PRESIDENT said that he had a letter from Mr. Grose regretting his inability to be present at the meeting. Miss Frazer, daughter of the late Mr. Daniel Frazer, wrote thanking the Council for their sympathy. Her father, she added, had many pleasant recollections of his friends on the Council.

Professors Balfour and Dobbin, and Mr. Boa wrote that they were willing to conduct the scholarship-examinations, as suggested by the Council.

The PRESIDENT said they were much obliged to them. It was only just that the Scotch Board of Examiners should have some of the honour and glory of the appointment.

ELECTIONS AND RESTORATIONS.

Thirty-two members were elected, two persons restored to their former position in the Society, and thirty-five student-associates were elected. Five names were restored to the register, and the REGISTRAR reported that in accordance with the powers conferred on him by the Pharmacy Act, he had added the names of two persons to the register, they having made the necessary declaration that they were in business before the passing of the Act.

FINANCE.

The report of the Finance Committee showed a balance on the

	£	s.	d.
General Fund account	50 18 5
Benevolent Fund	438 12 1
Donation Fund	105 0 0
Orphan Fund	277 8 0

and submitted for payment the sum of 1,937. 16s. 3d., which included the sums of 793s. for the journal, 53s. for salaries, 393s. sundry expenses, and 400s. current expenses in London and Edinburgh.

The PRESIDENT, in moving the adoption of the report, said they were beginning to get some money in. The finances of the Society were in a fairly sound condition. Donations of 100 guineas from Mr. Chas. Maw, twenty-five guineas from the Committee of the Chemists' Ball, and ten guineas from the Pharmacy Club had been received in aid of the Benevolent Fund.

The report was adopted. The Treasurer was authorised to pay the Bell scholars the moiety due on their scholarships.

LIBRARY COMMITTEE.

The report of the Library, Museum, and House Committee was then considered. The report dealt with the number of attendances at the museum and library, and the circulation of books, and recommended the purchase of copies of Muter's "Chemistry" and Maisch's "Materia Medica" for the library. It was also recommended that the President, Vice-President, and Treasurer should be the delegates of the Society to attend the ninth International Congress of Pharmacy to be held in Paris on August 2. A letter had also been received from the General Medical Council in reference to Pharmacopoeia revision.

Mr. GLYN-JONES said he should like to thank the committee for acceding to his request to have their report printed and circulated among the councillors, the more so because at the last meeting he was quite unsupported in his contention that the councillors should be supplied with copies of the report. In reference to the matter of Pharmacopoeia revision mentioned in the report he would like to know what the steps were which were going to be taken.

The PRESIDENT said he would explain the matter later on when they were in committee. The report was adopted unanimously.

BENEVOLENCE.

The report of the Benevolent Committee recommended grants—two of 20s. and two of 13s. It was mentioned that Mr. J. B. Watson, elected in 1894, had died at the age of 91.

The VICE-PRESIDENT moved the adoption of the report, and remarked on the fact that several of the persons relieved had been subscribers to the fund.

Mr. ATKINS, in seconding the resolution, referred to the death of Mrs. Naftel, which he announced at the last Council meeting. He had been requested by the family of the lady to express to the Council their gratitude for the help received from the Fund. Mrs. Naftel had a daughter quite helpless who was dependent on her, but it had so happened that the daughter died a short while before her mother. He had only to remark that, whatever might be said of the defects of the Council or Society, it could not be said that that one point of the charter—relief of distress—had not been honourably kept.

The PRESIDENT in reference to the Vice-President's remarks, said he did not think the fund should be looked on as a life-assurance fund. Every chemist ought to give liberally whilst he could, but it should not be on the idea that the fund was an assurance fund.

The VICE-PRESIDENT asked that the Press would make public the fact that Mrs. Harriett Parkes, the widow of a Freemason and pharmaceutical chemist, was a candidate for a Masonic pension. Those chemists who were Masons would be able by their votes to benefit the widow of one of their brethren.

The PRESIDENT said that Edwin Bennett, aged 7, the orphan of a former member, was recommended by the Benevolent Fund for the Watford Orphan Asylum.

The VICE-PRESIDENT said he would like to second that resolution, and to point out that the father of the boy was connected with the Society practically from its foundation; and although he had not been directly connected with the trade for the last seven years he still kept up his subscription to the Fund.

Dr. SYMES: Yes; not only did he subscribe to the Fund, but was a member of the Society and thoroughly loyal to it.

The recommendation was adopted.

The SECRETARY remarked that the late Mr. Bennett paid a life subscription to the Fund when he was 73 years of age.

OTHER MATTERS.

The PRESIDENT said that it had been decided to appoint two assistant local Secretaries for Bradford, a district which had grown much of late years. He proposed that Mr. J. A. Mitchell and Mr. S. N. Pickard be appointed.

This was approved of.

The preparation of the annual report was referred to the Library, Museum, and House Committee.

It was also announced that the fifty-ninth general annual meeting would be held on Wednesday, May 16, at noon.

Mr. CARTEIGHE remarked that some few months ago he stated that the bylaws which were being revised would be ready for approval at the annual meeting. He had since, however, found that it was not possible to have them ready by then, as there would be two sets of bylaws in force owing to the alterations in the examinations. They would find it better to begin with a clean slate, and when the existing bylaws were done with draw up a new set. This would be submitted at the June meeting, he hoped.

THE WATERALL LEGACY.

The PRESIDENT announced that the scheme drawn up by the Committee appointed was submitted to the Council for approval. The net income from the investment of the 1,000*l.* devised by Mr. G. E. Waterall is to be applied (a) to a member of the Pharmaceutical Society who shall have carried on business in the city of Nottingham for at least ten years prior to the date of his appointment; (b) or failing that, any chemist and druggist who shall have carried on business in the city of Nottingham for the like period; (c) failing both these, the Council have power to pay the income to any member of the Society or chemist and druggist wherever resident. The first net income is to be paid to a suitable person in April 1901. Persons elected as annuitants of the Benevolent Fund would cease to receive benefit from the Fund. Provision is also made for advertising a vacancy before making an appointment.

Mr. SOUTHALL asked why they should wait till 1901 before applying the Fund. If the money were invested in public Funds they would receive the interest half-yearly.

The PRESIDENT said it would simplify matters to pay it annually.

Mr. CARTEIGHE pointed out that the expenses of the scheme had to be charged against the Fund.

The PRESIDENT said the Fund would yield about 25*l.* a year after expenses had been paid.

Mr. ALLEN, in seconding the adoption of the Committee's report, said he must congratulate the Committee on the concise manner in which they had worked out a somewhat intricate matter.

The VICE-PRESIDENT moved a vote of thanks to the Committee who drew up the report.

The PRESIDENT, in thanking the Council for their vote, said the Secretary had done a lot of work at the scheme, having paid several visits to the Charity Commissioners to find out the best mode of working the scheme.

The report was adopted.

THE COMPANY QUESTION.

The report of the Law and Parliamentary Committee was then read. In this it was stated that the President and Mr. Carteighe had interviewed Mr. Ritchie, President of the Board of Trade, and, as a consequence, the Law and Parliamentary Committee recommended the Council to take steps to oppose Clause 2 of the Companies Bill.

The PRESIDENT said he had to report further that with Mr. Carteighe he went down to the House of Commons on February 20, and saw Mr. Ritchie in the Lobby. At the interview he explained their position. The Pharmacy Act of 1868 gave to qualified keepers of open shop the sole right to carry on the business of chemist and druggist, and by accident companies, which had not been anticipated by the Act, were placed outside it by the decision of the House of Lords in 1880. The companies had since gradually invaded pharmacy, and claimed the right to carry on the business of pharmacy. He (the President) asked Mr. Ritchie if it were not possible for them to be put in the

position they were in at the passing of the 1858 Act and previous to the 1880 judgment. Mr. Ritchie's reply was:

"IT IS ABSOLUTELY IMPOSSIBLE";

the most they could do would be to regulate the conditions now existing, and he (Mr. Ritchie) pointed out that plenty of their own men were doing things which gave the public less protection than did the system of company-pharmacy. Many of their own men had a dozen shops with their own name over each, while the Government proposed to do more than this by compelling pharmacy-companies to place the name of the manager over each shop. Mr. Carteighe then pointed out to Mr. Ritchie that Clause 3 stopped companies from carrying on the medical and dental professions, and that although it was the Pharmaceutical Society which had called attention to the matter, only those professions were mentioned, while pharmacists, who called attention to the condition of things, were given Clause 2, one which regulated only. Mr. Ritchie said it was simply impossible to add them to Clause 3, or to amend Clause 2 in the way required. He (the President) further pointed out that the wording of the clause, "and use the description of," gave away titles which could only be obtained by individuals. If they were thus bestowed on companies, the time would come when individuals would take them; in fact, any capitalist would be able to use them. Mr. Ritchie reminded them that the clauses were the Lord Chancellor's clauses and must stand. Clause 2 was for regulating pharmacy as carried on by companies, and this surely, he argued, was an improvement on the present state of unregulated company-pharmacy. This attitude had, the President continued, caused the Council to decide to have nothing to do with Clause 2, which took from them the sole right to practise and those titles which could only be obtained by examination. They came to the conclusion that the only consistent course was to decidedly oppose the clause. The President therefore moved—

That the Law and Parliamentary Committee be empowered to take immediate steps to oppose Clause 2 of the Companies Bill.

Mr. STORRAR seconded the resolution, and in doing so said he believed the reasons which induced him to support the resolution would not be the same as those of the majority of the Council or the Society. Last October the Council came to a resolution that a company-clause should be drawn up in hope that one might be devised which would be accepted. The clause, however, when presented was remitted to the Law and Parliamentary Committee. It might seem as though he was now going back on his former position, but they must remember that these instructions to the committee were given before the present Bill was introduced, and they were entitled to reconsider the question now that the Board of Trade had positively declined to listen to any amendment of the clause. The original intention of the Pharmacy Act was that the so-called privilege of dispensing and selling poisons should be restricted to qualified men, and it was a breach of that privilege to withdraw it. On the other hand, the Law Courts had decided that no protection was to be given to qualified men as far as companies were concerned, and that the public were sufficiently protected if companies employed qualified men. He recognised that Clause 2 was

AN HONEST ENDEAVOUR OF THE LORD CHANCELLOR

to secure the practice of pharmacy, and prevent the matter going any further. It appeared to him that the only possible policy was to oppose the clause as taking from them certain titles. In giving the use of titles the clause had gone beyond the present state of the law. The reasons why the clause should be opposed, and no attempt made to amend it, were that while the Council were absolutely unanimous in opposing the clause so far as it infringed titles, when they attempted to provide an amendment of the clause they fell to pieces. One section wished to make it entirely illegal for companies to trade in pharmacy, which was an entirely incompetent amendment, as the courts have held that they can. Another section wished to have qualified directors. This was not a good thing, as they may make qualified directors, but they could never insist upon them taking an active part in the direction of the business.

The Council had been trying to frame a clause for six months, but the suggested clauses were so numerous that it was utterly hopeless to unite even the Council on any amendment so much more the Society generally. He was not hopeful—in fact, he had no hope at all—of getting rid of the Company question; but he felt, as a member of the Council and a representative of the Society, that they could not give away their position. If they began to tinker with the clause they would be giving away their position in agreeing to the principle of controlling instead of abolishing Company pharmacy. They should rather look to getting an amended Pharmacy Act, which they could not do if they had previously given assent to the principle suggested in the clause. If the Government were to carry the clause it would disappoint many of their supporters, but they would be in a better position than before as regards amending the Pharmacy Act, especially if they could convince the Lord Chancellor that they had a good case. If, on the other hand, the clause were dropped it would leave the coast clear for an amendment of the Pharmacy Act. The only thing they could do was to be unanimous in their opposition.

Mr. WALTER HILLS said he rose to move an amendment to the resolution. It was:—

That the Watch Committee be instructed to secure, if possible, the amendment to Clause 2 of the Companies Bill, in the direction of securing to qualified persons the exclusive use of their titles and such regulation of companies, which will, to their satisfaction, provide that persons controlling the business of a chemist and druggist will be qualified, and that in the event of their failing to secure either of these objects they be instructed to oppose the whole clause.

As his friend Mr. Storrar had said, it has been shown that the Committee could not frame a clause owing to considerable differences of opinion, and it was to take the opinion of the meeting that he moved his amendment, members would then have an opportunity of expressing their opinions. Those who voted for his amendment would practically admit that no legislature should interfere with company-pharmacy if certain safeguards were taken. When he spoke to gentlemen of the Council privately, and asked them if they thought the Legislature would ever pass a measure to prohibit companies from carrying on the business of a chemist and druggist, they invariably shook their heads and said they did not think any Government would.

The VICE-PRESIDENT: What is the business of a chemist and druggist?

Mr. HILLS: As defined in the Act. He was anxious that the practice of company-pharmacy should be regulated so as to make it more difficult to carry on pharmacy by companies. The Government sought to regulate existing conditions so as to conduce to the safety of the public, and he said once for all, let them either oppose the clause or assist the Government in a condition which they must recognise. It might be said that the result of the interview of the President and Mr. Carteighe with Mr. Ritchie admitted of no amendment, and that any amendment they moved would lead to the same result. He did not think so; he thought

IT WAS BEST TO THRASH OUT THE QUESTION

in Parliament. They were practically unanimous on the title-question—that companies which were not controlled by pharmaceutical chemists or chemists and druggists should not have the right to call themselves chemists. He said “practically unanimous,” as there were some even who did not see why they should not use a title, which they owned in a personal capacity, in their corporate capacity. On the question of titles he felt he could go to any member of the Government with confidence and expect to receive a hearing. It was quite possible they might get support and make the Government consider the question.

Mr. STORRAR said the resolution did not preclude such a contingency.

Mr. HILLS said the resolution was simply that they were to oppose the clause. If the clause were dropped, they would be in a much worse condition than before. Every year the condition got worse and worse, and he considered that now they ought to ask for what would be to the advantage of the greater number. He might be asked why he suggested the Watch Committee be given these great powers. Well, he said, the Law and Parliamentary Com-

mittee evidently could not frame a clause, and the Watch Committee was composed of men of different views and readily “get-at-able” by the President. They should certainly take as much of the *bona-fide* control of companies as they could get. It was no encouragement to frame clauses as long as it was felt that the greater part of the committee were opposed to touching “the unclean thing” at all. If his amendment were carried, it might come to the same thing as the resolution; but he thought they ought to try and deal with the matter in a practical manner, recognising that while companies existed they should have some control over them.

Mr. HARRINGTON seconded the amendment. He thought they should take something while they had a chance of getting it, and not wait for the chance of getting a new Pharmacy Bill.

The VICE-PRESIDENT said his view was that after the answer of Mr. Ritchie they ought to oppose the clause, recognising that it contained something that, as the Pharmaceutical Society, they ought not to countenance at all. If the Government were anxious to legislate for pharmacy, they should come to them and ask them what they would recommend. As it was, they had been entirely neglected. The Government ought to have come to the Society to get some information as to the lines which pharmaceutical legislation should take. He had no sympathy with any attempt to regulate company-pharmacy. He was sorry that some of the eloquence he had heard was not on his side; his views were not altered one iota. It was their duty to administer the Pharmacy Act, and company-pharmacy was an excrescence or outside growth which they had no business to recognise. It was a thing which would out-grow itself, although he was bound to say they were suffering seriously from it. Their duty was to maintain the strict letter of the Pharmacy Act, and he confessed they might have done more in protecting titles than they had. There had been various sorts of amendments on the question, and he was satisfied that they could never come to a unanimous opinion, therefore their only stand was to adhere to the principles which had guided them for years. He looked upon the amendment as absurd in one way, as it was not the control of a pharmacy that mattered so much as the conduct of a pharmacy, and here one individual could control any number of pharmacies.

Mr. HILLS pointed out that the Watch Committee would require the control to be to their satisfaction, and they were all practical men.

The VICE-PRESIDENT, continuing, said it would be a great mistake to place that power in the hands of the Watch Committee, as the Council did not know how far they would go. If the Council recognised the principle contained in the Company Bill, which, after all, was mainly a financial Bill, and pharmacy had no business there at all, they would be compelled eventually to admit that a single individual ought to have the same rights as seven individuals.

Mr. GLYN-JONES said he supported the amendment proposed by Mr. Hills. He took that opportunity of publicly stating that for the present position of affairs the Law and Parliamentary Committee was largely responsible. In October the Law and Parliamentary Committee came to the Council suggesting that a clause dealing with company pharmacy should be drawn up, and, after discussing the question for two hours, the Council with but one dissentient asked the Committee to draw up a clause. In November a clause was submitted, which was referred back. In December and January they had no reports, although on the agenda for the January meeting it was stated a report would be submitted. Since then, however, a most serious step had been taken. The Committee went out of its way to express a definite opinion, but did not communicate it to the Council, but to the Government. The President wisely did not go to the President of the Board of Trade, but wrote a personal letter—the expression of the opinion of the Committee. This was as khaki a coloured policy as ever he saw. It could be taken to mean two or three different things. They had it in heavy type in their journal:—

That inasmuch as a limited-liability company could not be examined and registered in accordance with the provisions of the Pharmacy Acts it should be unlawful for any such company to assume or use any title implying registration under those Acts; and that it is not desirable in the public interest that any person

not registered under the Pharmacy Acts should be permitted to exercise any control over the retailing, dispensing, or compounding of poisons.

"Not desirable," indeed! Why, it is "not desirable" that the landlord should call for the rent, but that did not imply that he should not. The views expressed were not the views of the Council, but of the committee, who had no authority to pledge the Council. He would most probably be told that the committee was practically the whole Council; but they had positive proof that its views were different, or it (the Council) would not have sent the clause back.

Dr. SYMES: Are we in order in discussing the details of the committee?

Mr. GLYN-JONES: I claim that we are.

Dr. SYMES (with warmth): I claim that we are not entitled to go into details of the Committee, it is out of order.

Mr. GLYN-JONES: I am basing my arguments on them.

The PRESIDENT: The details are well known, but stick to the question, please.

Mr. GLYN-JONES: Of course, if you object, I must state my reasons elsewhere.

The PRESIDENT: Go on. Go on.

Mr. GLYN-JONES, continuing, said the report of the Committee should have been brought up four months ago. That Committee were largely responsible for the present state of affairs. Nothing was done till the Bill was in print, and Mr. Ritchie thought he had received a deputation from the Council. There had, however, been no official communication whatever from the Council. The Vice-President wished them to just do nothing—anything, in fact, but take definite lines. He was told that it was impossible to get what the Council wanted, and that the clause which the Law and Parliamentary Committee suggested would stand a better chance in a Pharmacy Bill than in a Government Bill. But how could they hope to carry out their wishes in a private Bill against the Government. They ought not to turn round and say the Companies Bill was not the place to deal with it; they asked the Government to deal with the question, and they had done so, not, he admitted, as they would like them, but in attempting to place misguided company-pharmacy on a satisfactory footing! They placed themselves in an awkward position by simply opposing the clause. It was a grand opportunity of having a fight on this great question, and it was not often they got the opportunity in the House of Commons. Let them try and make use of the opportunity and get a step in advance. What was the Council going to do if one of the Federation clauses was accepted—if one prohibiting company-pharmacy were adopted, for instance? They were pledging the Council to do nothing but oppose the clause. (No, No.) The amendment was with the object of getting to know if the Government would deal with the question in any other way. Let them stick to their endeavour of October to get some step in advance.

Dr. SYMES said the Law and Parliamentary Committee consisted of the whole Council. (No, no!) Well, practically all. The committee had given a large amount of time to the consideration of the subject, and if they had to go over the work again would doubtless come to the same conclusion. The best they could do was to recommend. When Mr. Ritchie told the President of the wrong things chemists were doing he (Dr. Symes) hoped the President told him that they were absolutely untrue. There were black sheep in pharmacy as in medicine and dentistry; but cases were very few, and they were dealt with when they were brought to their notice.

Mr. CARTEIGHE said Mr. Ritchie's remark was that the Government were asking companies to put up the name of the manager over each shop, which was more than their own men did.

Dr. SYMES then called attention to a useful Bill which was before Parliament—the Registration of Firms Bill—which he thought would help them in getting to know who were actually the persons carrying on the business.

Mr. CARTEIGHE: Hear, hear.

Dr. SYMES, continuing, said that no doubt a business name was goodwill, and those persons carrying on a legitimate business would be only too delighted with a Bill which would register firms. Turning to the Companies Bill again,

he thought that any commercial man reading the Bill through would see that the introduction of Clauses 2 and 3 in such a Bill was incongruous. What had the Government done in the case of medicines? Medical companies were legal as far as they knew, yet no attempt had been made to honestly regulate them as Mr. Hills suggested. They had asked for bread and were given a stone; well, those who cared to take it could do so.

Mr. HILLS: I did not say anything about the Lord Chancellor honestly regulating company-pharmacy—the expression came from the other side of the table.

Dr. SYMES, continuing, said the London and Provincial Association used the title chemist, but it was not a good case to fight about the title. If the owner had called his firm John Mackness & Co., there would have been individual qualification implied. But in the case of the Association the public were not led to suppose that an association was a qualified person—it was only when the name of an individual was used that the public might be led to believe that a person was using the title. He had been told that people did not care for titles, but only to-day he was told that one of the largest persons carrying on company-pharmacy had incorporated the name of chemist in his title, and he believed they would have great difficulty in dealing with that. The company question had better be dealt with in a Pharmacy Bill. They were entirely unanimous in protecting titles, but they had better not attempt to tinker with the clause, or they would weaken their power in opposing it definitely. They could successfully oppose it, but if they attempt to amend it they would fail.

Mr. GLYN-JONES: If the motion is carried the Council will have to oppose all amendments.

The PRESIDENT: No; we could still get members to put amendments.

Mr. GLYN-JONES: If that is so, I must say I really do not understand the motion.

Mr. STORRAR: The position is this. We resolve to oppose the clause and not to amend, but Mr. Hills's amendment commits the Council to amend the clause.

Mr. HARRISON said they could not commit the Council to any amendments; they would have to be dealt with as they arose. He did not think Mr. Hills's motion was an amendment at all. It appeared to him to be a negative to the motion of the Law and Parliamentary Committee. Mr. Ritchie was not likely to accept an amendment, and he said it was impossible to revert to pre-1868 days. The clause was incorporating a new principle into the Pharmacy Act. A qualified person now had no power of conferring his title on anyone else, but by Clause 2 he could give it to the person who employed him. He saw, too, great difficulties in defining *bona-fide* conducting a business. It had been found to be very difficult to define a *bona-fide* traveller. There must be an outward and visible sign of an inward and spiritual grace in the way of defining what *bona-fide* conduct was. The clause would introduce a fresh principle into the Act, and therefore he voted for the absolute and uncompromising opposition to it. There were great difficulties in bringing companies under control. He was prepared to see what could be done to bring them within the Act if he was asked to do so by his constituents or the Government. There was nothing in the clause that could be squared with an honest attempt to deal with the regulation of companies. If the clause passed it would place the companies in a better position than they now occupied. Had the public safety been so endangered by their administration of the Pharmacy Act that they were insulted by such a clause? A chemist and druggist placed in his business personal capacity, personal character, and all his capital; but in the case of a company it has not the first two requisites, but only the capital, so that instead of three hostages it can only give one. He hoped that at this crisis they would be so firm and united that when the clause was dropped, as he believed it would be, they would meet and try to find a *modus vivendi* to remove the difficulty. ("Hear, hear," and applause.)

Mr. SOUTHALL rose to support the amendment. He thought they might do something, with the help of the Government. The position was a very difficult one, and they might have to accept that which, as pharmacists, they did not wish to accept. The companies were becoming big, and they could not get rid of them. He was afraid they

could not do much, as they were very much in a minority. (Cries of "Don't say that," and "Buck up!")

MR. ALLEN said the amendment would, to some extent, damage their position. They would be surrendering a principle that had guided the conduct of the Society hitherto. As an individual it seemed to him wrong to surrender the principle, and certainly the members of the Society had not shown any particular desire to do so. He was inclined to think that the course of company pharmacy would be stayed in the course of years. They heard, at that time, a lot about Outlanders, but pharmacy companies were outlaws. (Hear, hear.) He wished them to remain so, when they could deal with them, but if once they were incorporated with their Society they would not be able to. He would like to know if any attempt had been made to educate M.P.'s as to what a chemist's business was. The business could be made by Act of Parliament of a thoroughly professional nature. He thought it better not to give a silent vote on a question of surrendering a principle.

MR. ATKINS said his position had already been well expressed. The arguments that day had traversed a large field, but it was good for the country that they should have a field-day. The elaborate history related by Mr. Glyn-Jones—

MR. GLYN-JONES: I had not half finished it.

MR. ATKINS: No, I don't suppose you have. We all know you have a capacity to hold on. (Laughter.) Continuing, Mr. Atkins said he understood from the President's interview that Mr. Ritchie was not very sweet on the clause, and that the spirit and intention of the Bill was other than dealing with pharmacy and medicine. If they did not love the clause they should be materially helped by the sponsor in getting it removed. He was an old fossil, and had been chaffed about burning the boats—(laughter)—but he would oppose the clause altogether as it was opposed to their Acts, their charter, and their future hopes of a higher level of education. He would not be a party to the regulation of stores. Their qualified men had to fight a most illegitimate competition, and as trustees of the best interests of pharmacy they (the Council) must protect them. Regulation may come, but for them to meet it was wrong. Let the regulation come from the outside: he would not be a party to regulating stores.

THE PRESIDENT said there were one or two points on which he would like to defend himself. The committee instructed him to get from the Government their views before formulating a clause.

MR. GLYN-JONES: Your letter commits this Council to certain views.

THE PRESIDENT: I tried to get the views of the Government as soon as possible. I found that the Government had made up their mind, and that the Lord Chancellor had formulated their views twelve months ago. Even if we oppose this clause we can still move amendments through members. The Watch Committee would take steps as occasion required.

MR. GLYN-JONES: That is the very point of the amendment.

MR. HILLS: Yes; I should like it to be made clear.

THE PRESIDENT: We could still make amendments. They could be done *sub rosa*, I suppose. (Cries of "Oh, oh.")

MR. STORRAR: We had better clear up that point. We can oppose the clause how we like. It does not mean that we are to oppose it without suggesting amendments.

MR. GLYN-JONES: Are we to move for the deletion of the clause? (Cries of "Yes.") Well, if we delete the clause how can we amend it?

DR. SYMES: If we fail to delete it the committee will come back to the Council for instruction.

MR. STORRAR: The difference between the motion and the amendment is that the amendment says the committee should frame an amended clause, while the motion does not amend, but gives the committee full power to oppose.

MR. HILLS: Many councillors say they cannot allow company-pharmacy to exist; it is an unholy thing, therefore they cannot allow anything to be done.

THE PRESIDENT: The motion leaves the matter still open.

MR. GLYN-JONES: No; that is what the amendment is to do.

MR. CARTEIGHE pointed out that Mr. Storrar only objected to the Society officially supporting the clause.

THE PRESIDENT then read out the amendment, but before it was put Mr. BATESON said he desired to speak.

MR. SAVORY: Haven't we had quite enough already?

MR. BATESON said he voted for the report being referred back to the committee, and as one of the few councillors not on the Law and Parliamentary Committee he would like to say they appeared to be in a mist. He would like to see the titles preserved, but there was not much in the title. A chemist and druggist could keep a pharmacy, but could not call himself a pharmacist. A man could also be a member of the Society without being a pharmaceutical chemist. His conclusion was that they should make the best use of the clause they could.

THE PRESIDENT then put the amendment, for which Messrs. Hills, Harrington, Bateson, Southall, Cross, and Glyn-Jones voted; the other twelve members present voted against it, and it was lost.

The substantive motion was then put and carried, with but three or four dissentients.

MR. HILLS: May I have it from the chair that no amendments will be considered until they have been submitted to the Council?

THE PRESIDENT: That shall be done.

UNIVERSITY OF LONDON.

MR. CARTEIGHE said they would be interested to hear that the steps taken during his Presidency in reference to the University of London scheme were maturing. The regulations of the Senate of the University had been drawn up, and would lie on the table of the House of Commons for the next six weeks. They would be interested to hear that a Board of Pharmacy was contemplated, and that their teaching staff (Professors Collic, Green, and Greenish) were recognised. The actual recognition of the school would come in due course. He had a confession to make that the ingenious title applied to their professor of *materia medica* originated in the fertile brain of Sir Michael Foster. It was his suggestion to call him professor of pharmacutics, as the term "*materia medica*" was too vague. (Hear, hear.)

LOCAL SECRETARIES.

THE VICE-PRESIDENT then proposed a motion that the General Purposes Committee be instructed to rearrange the districts of the local secretaries to correspond with the parliamentary divisions, except in London and Edinburgh. They all knew the great benefit of local secretaries, and yet they were only partially representative. He thought that the Council should appoint the local secretaries, and also relieve them of the work of collecting subscriptions. He would like their members to get away from the idea that the local secretaries only called when they wanted money.

MR. HARRISON seconded.

MR. CROSS thought that if the members were left to remit their contributions to the Benevolent Fund there would be a shortage.

MR. JOHNSTONE said it would be a mistake to take the collecting of the subscriptions away from the secretaries. The present system worked well in Aberdeen, and saved the members the trouble and expense of sending their subscriptions direct.

The motion was carried.

THE PRESIDENT said Dr. Jekyll had written to the Society in reference to the appointment of jurors for the Paris Exhibition. As the matter was somewhat urgent, he proposed that the Library, House, and Museum Committee be left to act in the matter.

This was done, and was the end of the public business.

FIFTY YEARS' ASSISTANTSHIP.—Mr. Ferdinand Michael has just celebrated his jubilee as assistant at the old-established apotheker at Plauen, in Saxony. During these fifty years Mr. Michael has served under seven principals.

RUBBER LAND BOUGHT.—Captain Frank Moritz, of Pennsylvania, and Mr. Robert Skiffington have arrived at New Orleans from Bolivia, after having explored the Upper Amazon country and purchasing 4,700 square miles of rubber land in that section from the Republic of Bolivia. The land will be cultivated in rubber orchards by the Chicago & Bolivia Rubber Company, with the aid of negro labour.

Winter Session.

Notices of meetings to be held are inserted under "Coming Events." If meetings are not attended by reporters, secretaries of associations would oblige by communicating with the Editor.

Royal Institution.

THE Friday evening discourse of March 2 was by Major Ronald Ross on

MALARIA AND MOSQUITOES.

The Duke of Northumberland was in the chair, and the attendance included Lord Rayleigh, Professor Dewar, Sir Frederick Bramwell, Sir James Crichton-Browne, and Lord Rosse.

Major Ross began by saying that he had a lecture written out but did not intend delivering it; he preferred rather to give an *extempore* description of the work which had been done on the subject. He then wrote on the blackboard the figures 178,197, representing the whole strength of the army in India in 1897, and the figures 75,821, the number of men who came to the hospital for treatment for malarial fever. In the whole of India 5,026,725 people contracted malarial fever in 1897. These figures helped the audience to realise the importance of the subject. The characters of the fever were briefly touched upon, the periodicity of the attacks being mentioned as the great peculiarity. An English physician, Pringle, suggested that the cause of malaria was a mist which rose from stagnant water, but it was only in 1880 that Laveran, a French army surgeon, discovered the specific parasite which caused it. Allusion was then made to the theories of King, Bignami, and Manson. It was through Dr. Patrick Manson that the lecturer came to begin his researches on the subject. Dr. Manson so impressed him (hypnotised him, Major Ross said) that he set to work to prove the correctness or otherwise of Manson's theory. It was necessary first of all to find out where the organism lives and its habits before the disease could be attacked, and it was by observing one day under the microscope that certain *Haemaphysalis* found in the blood of malaria patients threw out tiny flagellant forms that led to the recognition of the same parasite in mosquitoes. Major Ross argued that as the same change went on in the body of an insect it was probable that a suctorial insect was the means of spreading the disease. He first took up the work in 1895, and dissected hundreds of mosquitoes in the hope of finding the parasite in their bodies, but for two-and-a-half years he practically got no result. It was only when he turned from the *Culex*, the common kind of mosquito, to the *Anopheles* that he succeeded in locating the parasite in the body of an insect. Once found the task was comparatively easy, and took the form of tracing the development of the malaria parasite in birds. He succeeded in infecting a number of healthy birds with malaria by the bites of mosquitoes. The birds used were larks, sparrows, pigeons, and weaver birds, and it was found that not only the disease but the severity of it could be transmitted through the mosquito. Of twenty-eight healthy sparrows used in the final experiment twenty-two received the disease, the others escaping. Major Ross found the parasite *Haemaphysalis Danielowskyi* in the salivary gland in the thorax of the mosquito, and it was not difficult to see how the parasite could be passed on to a human being considering the habits of the insect. It is only the female insect which bites. The conclusions the lecturer arrived at have since been confirmed by Professor Koch, Professor Grassi, Dr. Bignami, and Dr. Bastianelli, and the discourse finished by the projection of a series of lantern-slides on the screen.

In the library there was a big microscope-display of bacteria and parasites, some hundred microscopes being requisitioned for the purpose. The Lyon-Cadett system of ventilation and the Adams-Randall telephone were also shown. The inventor of the latter pithily put the growth of the telephone as follows. In 1878 telephoning one mile was a great achievement, but to-day speech can be transmitted electrically over circuits of low-resistance copper wire 1,500 miles long. The improvement exhibited is to make it possible to speak over any circuit that can be operated by telegraph.

Chemical Society.

THE meeting on Thursday evening, March 1, was somewhat sparsely attended. The students of the Royal College of Science and Central Institution had been demonstrating that day (Ladysmith day), and by the time Professor THORPE called the meeting to order they had not sufficiently recovered from the effects of their enthusiasm to indulge in abstract science. The programme submitted to the meeting was the longest of the session; but, as far as pharmacists are concerned, the paper of chief interest was one from the Wellcome Chemical Research Laboratories, by Dr. H. A. D. JOWETT, on

PILOCARPINE AND THE ALKALOIDS OF JABORANDI-LEAVES.

It will be remembered that Dr. Jowett communicated a paper to the last meeting of the British Pharmaceutical Conference, in which he pointed out mistakes in the official description of pilocarpine nitrate, and his communication then indicated that something remained to be done in order to clear up the chemistry of the whole subject. The object of last week's communication was to supply the required knowledge, and to check previous work on the subject, which is somewhat unreliable, and to reconcile the conflicting statements which have been made as to the existence of pilocarpidine by Petit and Polonowski and by Merck.

Dr. Jowett finds that the work of Hardy and Calmels on this subject is unsatisfactory, very few melting-points, and no solubilities, specific rotations, or analyses being given by these workers, and in most cases the yields of the products obtained from experiments dealing with the constitution of the alkaloid are very small. Petit and Polonowski have given a detailed description of the salts of pilocarpine, and Dr. Jowett confirms most of their physical constants. In some cases there is a slight difference, which is probably due to the use of purer material. According to Hardy and Calmels pilocarpine acts as an acid, forming salts with copper and silver, and a double compound with silver nitrate. Dr. Jowett finds that the compound described by Hardy and Calmels as copper pilocarpate is really copper hydrate, and that the substance formed by the addition of silver nitrate to a solution of pilocarpine was given an incorrect formula. The substance thus formed has the formula B_2AgNO_3 .

Copper pilocarpate has been prepared, though in an impure condition, by boiling the aqueous solution of pilocarpine with copper hydrate and filtering from the excess of copper hydrate, and subsequent evaporation. The behaviour of pilocarpine with alkalies producing a variation in the specific rotation, as observed by Petit and Polonowski, is confirmed by Dr. Jowett, though he obtains different figures, this being due to the fact that the material which Petit and Polonowski worked with was not pure. The existence of a base isomeric with pilocarpine, and produced from it by the action of alkalies or heat, as stated by Petit and Polonowski, is also confirmed. The different salts of this base have been prepared and other physical constants taken, and in most cases they agree with those given by Petit and Polonowski. It was found that the other base could be distilled *in vacuo*, and that when pilocarpine was thus distilled it underwent a change into this new base. Its existence was questioned by Merck. It was termed pilocarpidine by Petit and Polonowski, and is extremely stable, differing from pilocarpidine first described by Harnack and Merck by CH_2 ; the term pilocarpidine, therefore, cannot be used for this base, and it is proposed to call it iso-pilocarpine. In behaviour, and in respect to its salts, it is very similar to pilocarpine. Iso-pilocarpine is contained in jaborandi-leaves and in the pilocarpine nitrate of commerce. Pilocarpidine nitrate was obtained from Merck, and proved to have the physical constants which had been ascribed to it by him. The author was unable to find any trace of pilocarpidine in the jaborandi-leaves at present obtainable or in the pilocarpidine nitrate of commerce. It is possible, however, that it exists in the leaves of *Pilocarpus Jaborandi*, which are extremely scarce, and which were the original source of pilocarpine.

Dr. Jowett was unable to obtain from the leaves any alkaloid having the properties previously ascribed to jaborine, and an examination of the jaborine of commerce showed it to consist of iso-pilocarpine, pilocarpidine, with possibly a little pilocarpine, and colouring matter. There is thus no

evidence at present of the existence of the alkaloid jaborine in jaborandi-leaves or of any alkaloid other than those described by the author.

Hardy and Calmels claim to have determined the constitution of pilocarpidine, and to have synthesised the alkaloid from pyridine lactic acid. Their statements, which are not substantiated by any analytical data, rest on the results of two or three experiments. These are the formation of trimethylamine and of pyridine-lactic and pyridine-tartronic acids. These experiments have been repeated, and no trace of trimethylamine has been obtained or any pyridine acid. The bases obtained were ammonia and methylamine, and, in the case of distillation with soda lime, picoline. The constitutional formula at present adopted for pilocarpine must, therefore, be abandoned. Further experiments on this subject are in progress, and the author hopes to communicate the results to the Society at a future date.

Mr. C. T. KINGZETT recalled some observations of his own in 1876. He then gave $C_{23}H_{35}N_3O_4$ as the formula for pilocarpine, and saw no reason for changing it to the formula which Dr. Jowett and others prefer. Professor Dunstan complimented Dr. Jowett on this good piece of work, expressing his satisfaction at the evidence that jaborine does not exist.

After a compliment from the chair,

OTHER PAPERS

were taken up. Professor KIPPING'S on racemic salts containing quinquivalent nitrogen was the first, and one by him and a pupil on a new synthesis of indene followed, with two by Professor DIVERS; after which Dr. LAPWORTH, of the School of Pharmacy, gave the gist of a communication by himself and Mr. EDGAR M. CHAPMAN, Salters' scholar, on some acids obtained from alpha-dibromo camphor. Some spectroscopic studies of tautomerism by Professor Hartley closed the proceedings, which were a trifle heavy.

Society of Chemical Industry.

LONDON SECTION.

THE usual monthly meeting of this section was held in Burlington House on Monday evening, March 5, Mr. Boverton Redwood (Chairman of the Section) presiding. After the preliminary proceedings the CHAIRMAN referred to the loss which the Society, and especially the Section, had sustained through

THE DEATH OF MR. WILLIAM THORP, B.SC.,

a Vice-President of the Society and former Chairman of the Section. Mr. Thorp, he said, was one of the few men capable of forming an independent judgment on abstract considerations of right and wrong, without being influenced by ulterior motives. He was essentially a strong man, and his views had always commanded the respect even of those who did not share them. Not the least remarkable fact in regard to Mr. Thorp was that for many years he suffered from physical disability, and his work done under this disadvantage amounted to heroism.

Mr. THOMAS TYRER, being called upon, endorsed the estimate of the character of his old friend Mr. Thorp that had fallen from the Chairman. He had never known Mr. Thorp to say anything of which he had a doubt without expressing that doubt. There was nothing of the smart man about him as smartness was generally reckoned, but for honesty and ability he had few rivals. Mr. Tyrer gave several instances from personal experience of Mr. Thorp's integrity of character, and referred to his connection with the City of London School and to the devotion of all his colleagues to him.

Mr. DAVID HOWARD remarked that it was very difficult for him to speak of one who had been his friend for more than forty years. He had never known him to do a wrong to anyone, and his whole experience of Mr. Thorp went to show his absolute pureness of heart and the benefits thereof.

Later in the evening Professor CLOWES, as an old school-mate of Mr. Thorp's, remarked that he had always regarded Mr. Thorp as an elder brother, and he thanked these three speakers for all that they had said in regard to his memory. Mr. Thorp was a chemist of considerable reputation, although he had rarely published anything arising from research, because

all his original work was work done in confidence, and the very fact that he had not published papers was proof of his integrity.

THE ANNUAL GENERAL MEETING.

The CHAIRMAN intimated that the arrangements for the general meeting, which is to be held in London in July, are proceeding in the most promising way, and there was indication that it would be a success. It was, he said, especially desirable that it should be so, seeing that the President of the year was an American, and when he came over he was to be accompanied by a considerable number of members from the United States. He hoped the meeting would be a record one.

Mr. R. W. ALLEN was then called upon to read his paper on

THE PRESENCE OF NAPHTHALENE IN COAL-GAS.

The paper recorded experiments which Mr. Allen had done in the laboratories of Professor F. D. Brown at the University College of London, N.Z. The communication was of special interest to gas-makers, but the following facts are worth the attention of pharmacists:—The author first determined that hydrogen, air and carbon monoxide take up equal amounts of naphthalene at various temperatures. It has hitherto been assumed by gas-authorities that coal-gas absorbs more naphthalene-vapour than any other gas, on account of the hydrocarbons which it contains. Mr. Allen put this to the test and found it to be erroneous. Practically any gas will absorb as much naphthalene as another gas at 32° F. 100 cubic feet of gas absorbs 6 gr. of naphthalene, and the amount increases with the temperature until at 212° F. 4,420 gr. of naphthalene is absorbed. Mr. Allen put forward the startling theory that coal-gas, absolutely free from naphthalene, deposits that body in the gas-mains, and although he gave no experimental explanation of this, he suggested that it was due to condensation of hydrocarbons in the gas. Professor Brown had tested the gas before it entered the clean mains, the test adopted being one devised by Mr. Allen, consisting of treatment of the gas with a mixture of equal parts of nitric and acetic acid, and subsequently with chromic acid. The benzine in this way converted into nitro-benzine, and the naphthalene into nitrophthalic acid, and on evaporation the former is dissipated, and the nitro-phthalic acid remains as brilliant yellow crystals.

Professor CLOWES opened the discussion, stating that Mr. Allen's paper was "a facer," as it upset all theories that gas-authorities had hitherto held. He was responsible for bringing the paper forward, and he thought the work done justified publication, and that the statements were well worthy the consideration of gas-authorities. The discussion was continued by Messrs. LACEY, HELPS, BUTTERFIELD, WATSON SMITH, and OTTO HEHNER. All were somewhat surprised at the results, and the first three gave from personal experience a corroboration of Mr. Allen's theory that there is more naphthalene deposited in gas-pipes than is contained in the gas as it leaves the gas-works. Mr. OTTO HEHNER made an acerbic criticism of the communication, and pointed out that there was not a scintilla of evidence that the gas from which the naphthalene came contained none before the deposition took place. Mr. ALLEN replied somewhat effectively, explaining that he is not a gas-authority, but had taken up the subject and worked at it for a year from a scientific point of view. The CHAIRMAN then made a few remarks, and called upon Mr. Marshall to read some notes on the "Determination of the Iodine Value of Oils."

Halifax and District Chemists' Association.

A MEETING of this Association was held at the Old Cock Hotel on Thursday, March 1, Mr. H. C. Brierley (President) in the chair.

The Companies Bill came under discussion, and it was decided to forward to each local member of Parliament the circular drawn up by the Editor of THE CHEMIST AND DRUGGIST, together with a letter from the Association pointing out the deficiencies in the Bill and suggesting an amendment to Clause 2.

A vote of condolence was passed with the Dewsbury Assq-

elation in the loss they had sustained by the death of their President, Mr. Foster.

Dewsbury and District Chemists' Association.

THE annual meeting of this Association was held on March 5 at the Town Hall, Dewsbury, and was well attended. Mr. G. WALKER (Dewsbury) was voted to the chair, and before the ordinary business was proceeded with he referred to the loss the Association had sustained through the death of their late President, Mr. Abraham Foster. He spoke at some length of Mr. Foster's personal qualities and abilities, and moved a vote of condolence with the late President's relatives, and Mr. W. STEAD (Heckmondwike), in seconding, alluded to his fifty years' association with Mr. Foster as playmate, school-fellow, apprentice, and, finally, as a member of that Association. The resolution was carried upstanding. Letters of sympathy were read from the Halifax and Bradford Associations.

The SECRETARY then read the annual report, which stated that the Association was in a sound position financially, and the slight decrease in the membership was counterbalanced to some extent by the affiliation of the Horbury district. The report likewise alluded to the Association's appeal against the Lord Chancellor's Bill to amend the Pharmacy Act, and their decision to oppose the Compounds Act Amendment, and other matters.

The report and Treasurer's statement having been adopted, the following officers were elected:—President, Mr. W. Stead; Vice-Presidents, Messrs. R. Gledhill and J. W. Cussons; Secretary, Mr. G. Walker; and Treasurer, Mr. R. Broadhead. Mr. Gledhill was thanked for his services as Secretary during the past two years.

Mr. CUSSENS then introduced the company question, and the discussion was opened by Mr. STEAD, who said that he had obtained from the *C. & D.* three copies of the circular published by that journal. One copy he retained for the Spen Valley division, one he sent to Mr. Gledhill, for the parliamentary borough of Dewsbury, and the third he sent to Mr. Briggs, for the Normanton division. He also drew up a petition, which had been signed by every registered chemist in the Spen Valley division, and which was sent, together with the *C. & D.* circular, to the local member, Mr. T. P. Whitaker. In the interim, the Federation of Local Associations had sent out their circulars, and he was in somewhat of a difficulty as to which of the suggested amendments he liked best—that of the *C. & D.*, or one of the two suggested by the Federation. Mr. Stead, having read Clauses A and B, went on to say that the best thing for the Association to do was to settle which was the best clause.

Mr. J. DAY thought Clause A could not possibly pass; and

the CHAIRMAN remarked that Clause A went the whole hog and Clause B was a compromise.

Mr. STEAD said Clause B went as far as they could possibly go, and if they got it they would do very well.

Mr. J. W. CUSSENS alluded to the absence of information as to the position of the Pharmaceutical Society on the question. Last year the Association, following up what had been done by the Editor of the *C. & D.*, circularised all the active members of the House of Lords, and, in his opinion, their action and the action of the Editor of the *C. & D.*, resulted in the withdrawal of the Bill. They were accused by the Pharmaceutical Society of being a little too active, and it was suggested that country Associations should wait for the lead of the Pharmaceutical Council in parliamentary action. The venue was now shifted from the House of Lords to the House of Commons, and they were close upon the second reading of the Bill. He had, however, yet to learn that they, or any other Association, had received any information from the Council of the Society as to what steps were to be taken in regard to this clause. The Council had done nothing. When an Association was prepared to do something they were told to stand back and wait for the lead of the Society; but if they waited much longer they would have the Bill passed containing the clause to which they objected. After Mr. Newsholme's speech at Bradford one would have thought that something would have been done, and if the Society had appointed a committee to go thoroughly into the matter with the co-operation

of a few gentlemen connected with the Associations in the provinces, they would have had one or two members ready to propose amendments to the clause when the Bill came up for second reading. If the Society had done its duty it could have secured members to place the views of the Associations before the House, and in addition they might have circularised all the members. But everything had been shelved, and nothing would be done if they continued to wait for the lead of the Council. He thought Clause B was the most likely one to pass.

Mr. GLEDHILL explained that he at Dewsbury had taken similar steps to those taken by Mr. Stead. A petition had been signed, and would be sent to the member for the borough (Mr. M. Oldroyd). He suggested that Clause B should be enclosed with the petition as the recommendation of the Association, and that they should interview members of Parliament.

The CHAIRMAN thought with Mr. Cussons that the Society had been very dilatory. The Councillors seemed to have been at sixes and sevens and unable to make up their minds to take definite action.

Mr. BROADHEAD felt a difficulty in interpreting the wishes of the chemists throughout the country, and he thought the safest thing would be to simply oppose the clause. Clause B of the Federation proposals was too grasping altogether, and would stand as little chance of success as Clause A. He proposed that they should fall into line with the Associations generally, but that no further action be taken.

After some further discussion Mr. GLEDHILL reminded the Association that they had already decided to oppose the Bill, and, if necessary, to be represented in London. How were they to carry out that resolution if they adopted Mr. Broadhead's motion?

Ultimately Mr. CUSSENS proposed that the Association adopt Clause B. This was seconded by Mr. DAY, and unanimously carried.

It was understood that copies of the clause would be sent to the members for Dewsbury, Spen Valley, Normanton, and Morley divisions, with requests to support the amendment.

Liverpool Pharmaceutical Students' Society.

THE fortnightly meeting of this Society was held on March 1, Mr. Prosper H. Marsden in the chair.

Mr. HAROLD WYATT, jun., read a series of

DISPENSING NOTES.

These notes were a continuation of a series of similar remarks on every-day work which he had at various times brought before the notice of the Society. The notes were intended for the guidance of young dispensers who might meet with similar peculiarities in prescriptions passing through their hands. He trusted they might afford some assistance in suggesting methods by which some formulæ of apparently hopeless incompatibility may be compounded with credit to the dispenser and satisfaction to both prescriber and patient.

Mixtures.

Antipyrin.	...	...	...	...	5ij.
Quinine sulph.	...	...	...	...	gr. xxiv.
Acid. hydrobrom. dil.	...	...	...	...	5iij.
Syrupi ..	...	...	...	...	5i.
Aque ad	...	...	...	...	3viij.

M. Ft. mist.

With some samples of hydrobromic acid a yellowish-red colour is caused if the quinine and antipyrin are mixed with the acid in strong solution—this, however, disappears on further dilution. This is due, perhaps, to the salts causing over-concentration of the acid, a trace of free bromine being produced and thus forming a red compound with the antipyrin. Dilute hydrobromic acid and antipyrin, when mixed in the above proportion, give a yellowish solution.

Sodii salicylatis	...	...	...	...	5ij.
Syrupi limonis	...	...	...	...	5ss.
Aque chlorof. ad	...	...	...	...	3vij.

M. Ft. mist.

Contrary to expectation, there was no separation of salicylic acid in this. The citrate of sodium formed by the

action of the citric acid in the lemon-syrup dissolved the salicylic acid, the chloroform-water also assisting to keep the acid in solution.

Tr. ferri perchlor.	...	...	...	m 80
Acid. phosph. dil.	...	...	...	3ij.
Tr. nucis vom.	...	...	...	3ij.
Spt. chlorof.	...	...	...	3iv.
Aque ad	...	...	...	3viij.

M. Ft. mist.

A precipitate of ferric phosphate is unavoidable in this, but the density of the precipitate varies with the way of mixing. If the tincture of iron and acid be mixed together, and then diluted, a heavy precipitate will fall at once, increasing in density until about the third day, when the maximum is reached. Dilution of the tincture and acid separately before mixing causes the precipitate to fall slowly and in a very finely divided, almost gelatinous, condition. Thus prepared, the mixture is more slightly, and the precipitate is readily diffused.

Spt. atheris nit.	...	...	...	3ij.
Potass. bicarb.	...	...	...	3ij.
Tr. aconiti	...	...	...	mxxiv.
Syr. rhæados...	...	...	...	3ss.
Aque ad	...	...	...	3ij.

M. Ft. mist.

Dissolve the bicarbonate in an ounce of water; then add the spirit of nitre, shake well, and lastly add the syr. rhæados. As most samples of spt. ather. nit. are acid, it is necessary to neutralise them before adding to the syr. rhæados, or the colour of the syrup may be bleached to such an extent that the blue colour of the finished mixture will vary considerably.

Potassii iodidi	...	...	...	3ij.
Quininæ hydrochlor.	...	...	...	gr. 32
Syrupi aromatici	...	...	...	3ij.
Aque ad	...	...	...	3viij.

M. Ft. mist.

The intention of the prescriber was evidently to give a salt of quinine in combination with potassium iodide, and—aware of the fact that quinine in acid solution gives with iodides of the alkalies a precipitate of iodide of quinine which rapidly becomes coloured by liberation of iodine until an iodo salt of the alkaloid is formed—he had chosen the most soluble salt of quinine as being in his opinion the least acid.

The precipitation of quinine iodide, however, cannot be avoided. Still, if diluted hydrochloric acid be added drop by drop, this iodide is redissolved, but, on standing, traces of the iodo salt of an orange colour separates, and the mixture becomes deep yellow in colour.

Bearing in mind the wonderful effect of a trace of hypophosphorous acid in preventing liberation of iodine, he made a series of experiments, and found that the mixture could be made so as to remain permanently clear and free from colour, even when exposed to sunlight, if about 20 minims of dilute hypophosphorous acid were used to dissolve the precipitated quinine iodide.

Syrupi ferri iodid.	...	...	...	3j.
Olei morrhue ad	...	...	...	3vj.

M. Ft. mist.

Most specimens of cod-liver oil contain hydroxyl compounds, or, at any rate, bodies capable of liberating iodine from iodides. The amount of these iodine-liberating substances present is inversely as the freshness of the oil and the care with which it has been kept. When the syrup of iodide of iron is added to cod-liver oil a brown colour is first formed, and this goes on increasing in depth until the mixture is deep red. A slightly and presentable emulsion is easily made from this formula by shaking half the oil in a dry bottle with 6 gr. of powdered tragacanth, and then pouring in the syrup of iodide of iron, diluted with $\frac{1}{2}$ oz. of water containing 6 minims of dilute hypophosphorous acid, and making up with oil to 6 oz., and well shaking. So made this will keep well for a considerable time.

Liq. calcis	...	...	...	3iv.
Liq. bismuthi	...	...	...	3j.
Nepenth.	...	...	...	mxxv.
Spt. chlorof.	...	...	...	3iss.
Aque ad	...	...	...	3viij.

M. Ft. mist.

When the solution of bismuth is added to the lime-water a white precipitate of bismuth hydrate falls if the liq. bismuthi is free from more than a trace of ammonium citrate.

With the old liq. bismuthi a precipitate is formed which is gradually taken up (after standing for a while) by the ammon. citrate present.

Calcii chloridi	...	...	...	gr. 320
Potass. bromidi	...	...	...	gr. 320
Syrupi ferri iodidi ad	...	...	...	3iv.

M. Ft. mist.

This gave considerable trouble, and varied in colour when made by different operators. The chief cause of this was alkalinity of the calcium salt. A good mixture was turned out by dissolving the bromide in 2 oz. of simple syrup by the aid of heat and allowing to cool; then dissolving the calcium chloride in $\frac{1}{2}$ oz. of water and $\frac{1}{2}$ oz. of syrup, with enough dilute hydrochloric acid to produce a non-alkaline solution. Mix these solutions and finally add sufficient concentrated liq. ferri iodidi (made with hypophosphorous acid as a preservative) to correspond with 4 oz. of syrup of iodide of iron, making up to 4 fl. oz. with simple syrup.

Pills.

Argenti oxid.	...	...	...	gr. viij.
Ext. belladonnæ	...	...	...	gr. viij.
Aloin.	...	...	...	gr. x.
Pil. aloes et ferri	...	...	...	gr. xxx.

M. Ft. massa et divide in pil. xvj.

To protect the oxide against reduction it was rubbed to a paste with cocoa-butter 8 gr. The other ingredients were massed separately with honey, the oxide mass then quickly and lightly worked in and the mass cut into sixteen pills; weight of mass, 65 gr. The pills kept well, and were often repeated.

Codeinæ	...	...	...	gr. 4
Argent. oxid.	...	...	...	gr. 4
Pepsini	...	...	...	gr. ij
Taka diastase	...	...	...	gr. ij

M. Ft. pilula. Mitte xij.

Make a mass of the codeine, pepsin, and diastase with honey, and afterwards rub in the oxide massed with cocoa-butter. Weight of mass, 80 gr.

Resinæ guaiaci	...	...	...	gr. ij
Resinæ podophylli	...	...	...	gr. 4
Ol. cajuputi	...	...	...	mij
Masse pilul.	...	...	...	q.s.

Ut ft. pilula. Mitte xxx.

Melt the guaiacum resin with 22 gr. of beeswax and stir until nearly cold, when add the oil and the resin of podophyllum. Beat hard until homogeneous and make up to 150-gr. mass with very dry and finely-powdered marsh-mallow-root, and cut into thirty pills. The marshmallow prevents the pills falling and helps in their disintegration.

Aloin.	...	...	...	gr. 4
Ol. menthae pip.	...	...	...	mss.
Ferri sulph. exsicc.	...	...	...	gr. j
Niccoli sulphatis	...	...	...	gr. 4
Ext. belladonnæ	...	...	...	gr. 4
Ext. nucis vom.	...	...	...	gr. 4

Ft. pil. Mitte xij.

This formula was brought before the notice of the L.P.S. Society last year by Mr. Jenner. The best excipient turned out to be beeswax used in the following manner:—Rub the salts to powder with the aloin and powdered extracts of nux vomica and belladonna, turn out of the mortar, and proceed to work up the essential oil of peppermint with 6 gr. of beeswax in fine shavings, to which when smooth the powders are added.

Digitalin. (Codex)	...	...	...	gr. $\frac{1}{30}$
Strychninæ	...	...	...	gr. $\frac{1}{30}$

Ft. pilula. Mitte 50.

A medical man wished these made up for a fastidious lady patient, desiring them to be as small and well turned out as possible. Triturations of digitalin and strychnine were made with sugar of milk, and for every fifty pills 10 gr. of compound tragacanth powder and sufficiency of

sugar of milk were used, massing with compound tincture of cardamoms. The pills turned out well, and looked very attractive. The patient, however, complained that they were not hand-made; but when the doctor saw the working formula in the prescription-book he was quite satisfied.

Ointments.

Acidi oleici ...	...	...	3ss.
Lanolin. hydros. ...	...	...	3ss.
Pot. carbonatis ...	...	...	gr. iv.
Potass. iodidi ...	...	...	gr. xxx.
Olei geranii ...	...	...	℥iv.

M. Ft. unguentum.

One of the Society's members made this up and found it turned brown, owing to the iodide being acted upon by the oleic acid. If the oleic acid be old and deep-coloured, this may take place; but if a fairly fresh, good sample, of light colour, be used, no colour appears when the ointment is made as follows:—Dissolve the carbonate and iodide in 72 minims of distilled water, add the oleic acid by degrees, then the essential oil, and, lastly, anhydrous lanoline 168 gr., well rubbing to a cream.

Hydrarg. perchloridi ...	...	...	gr. iiii.
Creta præparata ...	...	...	gr. 75
Acidi carbolici ...	...	...	℥ 150
Olei olivæ ...	...	...	℥ 150
Unguenti zinci ...	...	...	3viiss.

M. Ft. unguentum.

The oxide in the zinc ointment and chalk, it was at once seen, would have an action on the mercury perchloride if it were not protected in some way; accordingly the creta præp. was rubbed fine with oxide of zinc 3j. 3j., and the lard, in which the carbolie acid had been dissolved by heat, was stirred in until well mixed. When cool, the perchloride was added, dissolved in absolute alcohol 3ij., and olive oil ℥ 150, and the whole well stirred. On keeping, the ointment gave no visible signs of the perchloride being converted into oxide.

Ung. hydrarg. oxid. rubr. ...	...	...	3ij.
Acid. carbolici ...	...	...	℥iiij.
Ung. sulphuris ...	...	...	3ij.
Ung. petrolei... ...	...	...	3vj.

M. Ft. unguentum.

If liquid carbolie acid is used, this ointment is apt to darken in colour; but where crystal phenol is employed it keeps for long periods.

A good discussion followed the reading of the paper, and a vote of thanks was accorded to Mr. Wyatt.

Great Yarmouth Chemists' Association.

THE first annual dinner of this Association was held at the Angel Hotel on Thursday evening, March 1. Mr. W. S. Poll occupied the chair and Mr. H. Palmer the vice-chair, and there was a capital muster of the members, all but two being present. After the usual loyal and patriotic toasts had been duly honoured, Mr. Pechey gave the toast of the evening—"Success to the Association," which was ably replied to by the Chairman. A most enjoyable evening was spent and the first Association dinner was voted a great success.

Southport Chemists Congregate.

A MEETING of the chemists and their assistants of Southport was held at the Scarisbrick Hotel on February 27, and Mr. George Ball presided over a large attendance. The meeting was mainly of a social character, and recitations, readings, vocal and instrumental music, and a fine cinematograph display were the principal features of the evening. In an interval the Chairman invited Mr. John Smith, of Liverpool, who was present "to give the meeting some information respecting the Federation of Local Associations." Mr. Smith, in reply, briefly outlined the aims and objects of the Association. The Chairman then expressed the opinion that as the great weakness of the Pharmaceutical Society seemed to be in that it represented less than a moiety of the registered chemists, an endeavour should be made to alter this condition of things, so that not only those who paid their annual

subscriptions but every chemist on the register should be represented. Perhaps that could best be done by making every chemist, by reason of his registration, a member of the Pharmaceutical Society, and he urged the Council to find a speedy means of settling this very urgent matter. These views received marked support. Many of those present joined the Local Association, and the meeting closed with the usual thanks and the singing of the National Anthem.

Edinburgh Chemists', Assistants', and Apprentices' Association.

THE subject brought before the members last week (February 28) was "Gold and Gold-beating," Mr G. H. C. ROWLAND being the essayist. His information was obtained through a visit to an old gold-beater's in an Edinburgh wynd, this being supplemented by bibliographic research and consistent quotation. We gather from the report of the paper that alloy of gold and copper is generally employed for making gold-leaf, but pure gold is occasionally used, as in the case of the Albert Memorial in London. The pure gold does not tarnish so quickly. There are ten degrees of colour in gold leaf—from red to white. In making the leaf the gold, or its alloy, is first heated in a crucible to a point higher than fusion in order to increase its malleability, and cast into ingots 3 by 1½ inches. This is rolled by powerful steel cylinders and annealed, and the process repeated until the ingot becomes a ribbon 20 yards long and as thick as note-paper. The width remains the same, as extension only takes place in one direction. The ribbon is divided into two pieces 3 oz. each (a piece for a man), and the beater divides it into 180; each piece is covered with membrane and beaten in a "cutch" with a wooden mallet for half an hour, then quartered. In this way 720 pieces are obtained. The hammering is renewed in a "shoder," and the pieces again quadrupled, and finally in a "mould" for five hours. The skin is made in France from the outer coat of the cæcum or blind gut of the ox. It takes 380 oxen to furnish sufficient for a "mould." The membrane stands years of beating before it is cast off as gold-beaters' skin. When the gold-leaf is $\frac{1}{750000}$ inch thick light can go through it, but not before. A grain of gold has been beaten into a surface of 75 square inches.

Mr. RUTHERFORD HILL then gave some notes on the Pottage Herbarium, in the course of which he described the methods usually adopted for collecting, drying, and mounting specimens.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association.

THE weekly meeting on March 2 took the form of a "Spelling Bee." Mr. J. P. Gilmour (President) acted as examiner and judge, and much merriment was created by the ludicrous blunders of some of the competitors. At the close of half-an-hour's struggle with the mysteries and pitfalls of English orthography, the only survivors were Messrs. B. Cockburn and J. Davie, to whom the first and second prizes were respectively awarded. Dr. Coull's lecture has now been definitely fixed for March 23, and the first annual dance of the Association is to take place on March 28. Tickets may be had from Mr. J. P. Gilmour, 419 Victoria Road, or any member of committee.

North-East Lancashire Chemists' Association.

A MEETING was held at the White Bull Hotel, Blackburn, on Tuesday, March 6, to consider the nomination of Mr. R. Lord Gifford for election to the Pharmaceutical Council. Councillor Critchley presided. Letters of apology for non-attendance were received from Messrs. Heaton (Chairman of the Burnley Association), Brown (Secretary of the Burnley Association), Williamson (Secretary of the Preston Association), Whitehead (Morecambe), and Jepson (Darwen), who each intimated that in the event of Mr. Gifford being nominated they would do all they could to secure his election.

Mr. GIFFORD said the keynote of his position was that the Pharmaceutical Society should exist for the members,

and to administer the Pharmacy Acts. These functions had been neglected, and the only reparation was that they should help to put the trade in a rational position. For many years they had been observers of the methods of the Council as a body, and of the members of the Council individually, and it had impressed them as strange that it had never been thought necessary to awaken the interest of the drug-trade in its own affairs. The Council seemed to imagine that, if it had questions before it in committee, and decided or failed to decide upon them, that was sufficient for the members of the Pharmaceutical Society. Their association said that was not enough, and there should be discussion in open council; so his first

DECLARATION OF POLICY

was full publicity on all public questions. The Council's policy should be active more than defensive. People seemed to think chemists had no rights, and when they claimed them imagined that they were asking for something. He was strongly of opinion that the Council should establish the 1868 Act as it was passed: "In the interests of the public it shall be unlawful for anyone to sell or keep open a shop for retailing, dispensing, or compounding poisons, or assume the title of chemist and druggist." There was no difference of opinion amongst legally qualified chemists as to that. They heard many platitudes as to what was feasible and what was not; but first they should decide what were their rights, second claim them, and third establish them, before they talked about what was feasible. He deprecated the idea that a real, gilt-edged, copper-bottomed pharmacy would now be evolved from the nebulous haze. Special privilege was foreign to the present temper of the Legislature. His committee simply wished to make real the policy of the Act of 1868. More than that they did not require.

Mr. Gifford proceeded to show what the possibilities of the Act are, refusing to complicate these with other trade questions. He gave the Pharmaceutical Society credit for what it had done on the educational side, and attributed the Council's former inability to conserve the interests of qualified chemists to lack of sympathy with its members and its neglect to organise, proved by the existence of the Federation. As to the present position, he trusted that this week's Council meeting would have results which would spur the country on to a hopeful if difficult fight. In conclusion, he summed up the grounds upon which he should ask the support of the members of the Pharmaceutical Society:—(1) The Pharmaceutical Society for its members; (2) apathy of Council must be remedied; (3) organisation must not be delayed; (4) an active policy instituted and publicly courted in all matters of public interest; (5) that we must have the full effect of the 1868 Act. (Applause.)

Councillor R. SHORROCK (Darwen) said he was with Mr. Gifford with regard to the Federation. He had supported it through thick and thin up to the present time, but they did not seem to grasp the whole subject as he had looked at it. Two questions had recently been brought before them, one urging them to ask the Council to oppose the second clause of the Bill, while the other was not, in his opinion, in keeping with the object they had in view. The members of the Association wanted and demanded that the title of chemists should be secured to them. He moved the nomination of Mr. Gifford as a candidate for election on the Council.

Mr. PERCY BEAN seconded, and considered that, if elected, Mr. Gifford would not only do credit to North-East Lancashire and the North of England, but also to England.

Messrs. WELLS, HINDLE, LOMAX, and PICKWORTH supported the resolution, and approved of the policy advocated by Mr. Gifford.

Mr. HOLT said no better candidate than Mr. Gifford would appear before the electorate. Chemists who were taking an intelligent interest in the affairs of pharmacy would admit the pitiable weakness of the present Council in dealing with such a matter of vital interest to the qualified man as the clause in the compulsory Bill now before the House of Commons. It had been positively painful and disheartening to read month after month "that there is no report, because we have nothing to report." The Council had not the backbone to control the conduct of the official organ, and some members of the Council appeared to be willing to hand over their charter of incorporation to Mr. Jesse Boots, so that he

could form a pharmaceutical society of his own, while others appeared to be too incompetent to form an opinion at all. The President of the Board of Trade, as a sensible man, would not take into consideration the arguments of such a divided, incompetent body.

The resolution was carried with acclamation.

Principally Gossip.

THE PHARMACY CLUB was quite militant on Wednesday evening, the fathers of sons who have gone to the front (Mr. John A. Wink and Mr. Walter Hills) being called upon to speak. Much enthusiasm was manifested.

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THE SOCIETY OF CHEMICAL INDUSTRY annual meeting is to be held the week before the Conference, and the festivities will be exceptionally good. They will include a reception at the Mansion House by the Lord Mayor.

* * * *

WE HEAR that the protest made in THE CHEMIST AND DRUGGIST against taking members of the British Pharmaceutical Conference up the river in barges has been approved. The Entertainment Committee is considering an alternative plan—viz., to go by train to Marlow and come down the river in barges. Oh, what a jolly day we shall have!

* * * *

THE HOTEL RUSSELL, which has been spoken of as headquarters for the Conference, has still the scaffolding outside it. It is a mammoth building, occupying the north-east half of Russell Square, and within penny-bus distance of the railway termini in Euston Road and two minutes' walk from 17 Bloomsbury Square, where the meetings are to be held. Whether it will be ready in time, and, if so, whether Mr. Warreu will secure it for his Conference friends, are equally difficult questions to answer.

* * * *

"THE UTTERANCE OF FALSEHOODS hardly comes within the definition of 'candour,' whilst 'humbug' is surely an imposition under fair pretences, such as were uttered by" Mr. Gifford. This is a quotation from the Bloomsbury oracle. The italicised phrase helps to give meaning to an otherwise involved and head-splitting but suggestive sentence. The nearer they get to the ten-guinea Minor fee, the more reckless they get in that quarter. A reserve-fund for libel actions appears to be one of the Square's dreams.

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IT IS RUMOURED that Mr. Glyn-Jones has designs upon the Pharmaceutical Council, and is to run a list of seven candidates to take the place of the seven members who were balloted out at the February meeting of the Council. That is a bit of a surprise, for Mr. Glyn-Jones seems to be on quite amicable terms with his colleagues, and he has received encouragement and support during his brief term of office from Messrs. Walter Hills, David Storrar, and Charles Symes, who are amongst the retiring members. One of our staff buttonholed him one day this week, but he had something else on his mind at the time (euters' supplies or something), and would not speak of this. However, a lively election is expected, and Mr. Lord Gifford is to be joined by several other stalwarts, who will endeavour to capture the vacant morocco-covered chairs in the Council-chambers. Mr. R. E. Wright, the assistant, who stood last year, has again been nominated. March 18 is the last day for nominations.

* * * *

MR. BOVERTON REDWOOD grows more and more in speech like his father as years pass over him. At the Chemical Industry Club dinner on Monday evening it was difficult to realise when he was speaking that his was not the voice of the veteran Emeritus professor who did so much for English pharmacy. Mr. Redwood's theme was simply the toast of the guests of the evening, who, besides the readers of the papers, were Dr. Felix Schiff, of Vienna; Mr. George G. Mephum, an American member of the Society; and Dr. Ichioka, Ph.D., Professor of Chemistry to the Imperial Naval College of Japan. Dr. Ichioka spoke briefly in reply to the toast, excusing himself for saying little, because he had been only a few hours in England, and had not that grasp of the language which justified him in speechifying. He knows English very well, nevertheless, for in a conversation with him afterwards we found that he spoke quite fluently. Dr. Ichioka is well known to many members of the Section, and appeared to enjoy the dinner as well as the meeting afterwards held in Burlington House.

The Companies Bill.

Powder and Shot.

IT is reported that Mr. Ritchie will, on the Committee stage of the Companies Acts Amendment Bill, abandon both Clauses 2 and 3 of the measure, on account of the great opposition which has been brought against both. The opposition springs entirely from pharmacy and dentistry. Registered chemists and registered companies in the former section and registered companies in the latter are doing all they can to get the clauses amended, and Mr. Ritchie is not disposed to delay consideration of the main proposals of the Bill on account of these side winds. We give this announcement with due reserve, but we have it on excellent authority that Mr. Ritchie would rather that the clauses had not been in the Bill. We have received copies of a number of circulars and letters which have gone to and come from M.P.'s. The first of these is

THE FEDERATION CIRCULAR.

We have already reported what the Federation of Chemists' Associations intended to do. They have done it pretty thoroughly, sending to each Association in Great Britain, and each Pharmaceutical Local Secretary, four printed documents—(1) a personal letter, (2 and 3) A and B Clauses to amend Clause 2, and (4) a letter to be sent to members of Parliament. The suggested clauses are:—

A.

2. No company may use the description of a pharmaceutical chemist or chemist and druggist, or any other title implying registration under the Pharmacy Act, 1868; and no company may carry on the profession or business of compounding, dispensing or retailing poisons; and if any company contravenes this enactment it shall be liable, on summary conviction, to a fine not exceeding five pounds for every day during which the contravention happens.

B.

2. No company may carry on the business of retailing, dispensing, or compounding poisons, unless the business is controlled by directors, each of whom is registered under the Pharmacy Act, 1868, and unless such business is conducted, in each place where it is carried on, by an individual qualified in accordance with that Act, whose name is conspicuously posted outside the premises and printed upon all labels used in the business; and no company may use the description of a pharmaceutical chemist or chemist and druggist, or any other title implying registration under the Pharmacy Act, 1868; and if any company contravenes this enactment it shall be liable, on summary conviction, to a fine not exceeding five pounds for every day during which the contravention happens.

The letter to M.P.'s is well got up. The first page is in violet type-written characters, with spaces for the signature and address of the sender. It calls attention to the Government proposals, and asks support to one of the above amendments, the two only being sent for selection by the local body or secretary. On pages 2 to 4 of the circular are given reasons for amending Clause 2. These begin with a historical *resumé* of the chemists-company case, and leads up to a declaration of the inexpediency and injustice of the proposal to allow companies to assume the privileges reserved by the Pharmacy Act to individuals. Then come the following paragraphs in italics:—

1. It is contrary to public policy to permit any person who does not possess a competent practical knowledge of the business of a pharmaceutical chemist or chemist and druggist to exercise any control over the compounding, dispensing, or retailing of poisons.

2. The individual actually in charge of each establishment where poisons are compounded, dispensed, or retailed should be personally responsible to the public in respect to all business carried on in that establishment, but no manager or assistant could exercise such control over the business as alone would suffice in the public interest.

3. In the event of Clause 2 of the Companies Bill becoming law, the protection afforded to the public would be insufficient,

because no company would be responsible for the acts of its qualified managers or assistants, since it has been decided by the House of Lords that the seller of poisons under the Pharmacy Act, 1868, is the individual who actually conducts the sale, and not the person or company on whose behalf the sale is effected.

4. It is unjust to sacrifice the vital vested interests of a legal qualification, held by nearly sixteen thousand individuals, for the sake of a number of unqualified persons who have invested surplus capital in a business which they are not legally entitled to carry on as individuals; that, however, would be the position if Clause 2 of the Companies Bill passed in the present form.

5. It is as important to a patient that his medicine—particularly if containing potent remedies—should be dispensed by a competent person as that his medical attendant should be properly qualified; but it is not sufficient for the public safety that the dispenser should be properly qualified if any unqualified person is in a position to exercise control over him and to dictate the manner in which he shall perform his responsible duties.

6. While registered chemists do not seek to interfere in any way with the existing free trade in drugs and medicinal preparations, they consider that, so far as their strictly professional duties are concerned, they are entitled to be placed on a similar footing to medical practitioners, dentists, &c., whose practice it is proposed by the Government to protect, as against companies, by Clause 3 of the Companies Bill; the title "pharmaceutical chemist" or "chemist and druggist" is as valuable to its owner, and should mean as much to the public, as that of "physician," "surgeon," or "dentist," and in the public interest, as well as in common justice to the legitimate holder of the title, should be as strictly protected.

ANOTHER COMPANY CIRCULAR.

Mr. Jesse Boot, writing in the first person plural, and acting on behalf of 3,000 shareholders in the four Boots' companies, has prepared another circular, which has been sent to members of Parliament. It is somewhat longer than the one which we printed last week (page 375), but is, on the whole, a somewhat cleverer document. It purports to be a statement of "how Section 2 of the Bill will affect stores with a chemists' department, and companies trading as chemists." It comprises five arguments, and exhibits Mr. Boot's *finesse* by a clever appropriation of statements, which have appeared in our two trade contemporaries, especially against our proposal that pharmacy companies should be *bona fide* managed by directors who are qualified chemists. The first section begins by stating that—

Members of the Pharmaceutical Society have frequently induced their representatives in Parliament to believe that seven unqualified men, by forming themselves into a limited company to carry on a chemist's business, could render it possible for the public to obtain scheduled poisons from the hands of an unqualified man, and thus evade the Pharmacy Act. . . . This is not the case

—nor is it the fact. Members of the Pharmaceutical Society have never done anything of the kind, but have argued that it is unjust that the law should permit seven unqualified men to do what any one of them, or even six of them combined, may not do—namely, keep open shop for the sale of poisons, and call themselves chemists and druggists. The rest of the paragraph asserts that poisons can only be legally sold by registered persons.

In the second section Lord Blackburn's remarks in the House of Lords regarding sale by a natural person are quoted in support of the first statement.

The third paragraph quotes Section 2 of the Companies Bill as it left the House of Lords last year. Mr. Boot especially objects to the sentence in the clause which requires the name of the qualified person to be posted in the shop or other place in which the business is carried on. He argues that there is

no reason why this provision should be applied solely to companies, for if a private chemist has a branch-shop he is not obliged to put up in the shop the name of the manager. Moreover, private chemists carry on business under assumed or fictitious names. Prominent businesses like Dinneford & Co., J. Bell & Co., Savory & Moore, and others, belong to men who do not bear these names—and neither the names of the real owners or those of the qualified managers are exhibited. The Pharmacy Act provides that executors may carry on the business of a deceased chemist for an indefinite period under his name, and, in fact, in a northern town some eighteen businesses have been carried on for years in the name of a deceased chemist, at first by his wife, and subsequently by his daughter, without any obligation to post the managers' names in the shops. This particular regulation as to the exhibition of the names of owners and

managers of chemists' businesses could be dealt with more suitably in a Bill dealing directly with the Pharmacy Act than in a clause in the Companies Acts Amendment Bill.

The fourth section of the circular is divided into three subsections dealing with what "we have reason to believe the Pharmaceutical Society contemplates," Mr. Boot being thus much more sanguine than registered chemists and druggists have been regarding the intentions of the Society. As set forth by him their intentions are:—

(a) To entirely prevent stores and companies from trading as chemists

(b) To deprive companies established for the purpose of carrying on a chemist's business, of the right to use the title of "chemists."

(c) To enact that every director of such companies should be a qualified chemist.

The best paragraph under this heading reads as follows:—

This would be most unjust to such companies. For instance, for a number of years one of these companies, known as Boots (Limited), has spent many thousands of pounds in advertising and erecting signs, &c., describing themselves as chemists. The companies grouped under the name of "Boots, Cash Chemists," have over half a million capital and employed about two hundred qualified chemists to manage their branches. Many hundreds of qualified chemists are employed on the staffs of the other various drug-companies. Should any such company employing qualified chemists at each branch be prevented from using the title of "chemists," and, if so, what are they to call themselves?

In the fifth section of the circular the statement is made that leading members of the Pharmaceutical Society candidly confess that their real object is not the safety of the public, but their own self-interest. Mr. Boot's only support to this statement is a quotation from a letter sent to a contemporary by Mr. Earnard S. Proctor, a pharmacist now living in retirement. Mr. Boot then goes on to say:—

We desire also to be allowed to point out to you that this is not simply a matter between a small number of chemists on the one hand and a smaller number of companies on the other, but that it is one of far greater importance to the public at large. The real point at issue is whether chemists shall be allowed to again charge the exorbitant prices which formerly made the purchase of medicines so heavy a drain on the small resources of the people. Stores and companies dealing in chemists' and druggists' articles number their customers by millions because they have brought the price of medicine down to a natural and moderate figure. An attempt is now being made to undo this good work and to deprive the poorer classes of the benefit which competition has conferred upon them by the prices of drugs having been reduced to half those formerly charged, and that without in any way affecting the quality.

The circular concludes with a request that Clause 2 should be made identical with its original in the Lord Chancellor's Bill introduced last year, which, it will be remembered, was simply the present clause without the provision as to the posting of the name and address of the manager upon the doors.

THE GROCERS

are also having their hit at the Bill, the Federation of Grocers' Associations at last week's Committee-meeting having resolved, after considering Clause 2, to appeal to the President of the Board of Trade to extend the operation of the clause so as to provide that grocers might sell packed proprietary medicines.

BLACKBURN CHEMISTS.

On Saturday, March 3, the deputation appointed by the North-East Lancashire Chemists' Association interviewed Sir Harry Hornby, M.P., of Blackburn, and Mr. J. Rutherford, M.P. (Darwen Division), with reference to the Bill. The deputation consisted of Messrs. R. Shorrocks (Darwen), C. Parkinson, J. Booth, R. L. Gifford, W. Wells, and Percy Bean. Mr. Bean, in introducing the deputation, objected to Clause 2. First, because the title of "chemist" was a personal one, and by the spirit of the Act of 1858 could only be obtained by passing examinations. Second, the use of the title by companies, because they employed a qualified chemist, confiscated the rights and privileges of those who passed the examinations. Third, it was most unfair that a limited company of seven or more persons could obtain

rights and do those things that an individual, unlimited in responsibility, might not do. Mr. Bean stated that hundreds of businesses had been formed into limited-liability companies simply to evade the 1858 Act, and enable unqualified persons to deceive the public by calling themselves "chemists and druggists." He submitted that Clause 2 should be deleted and chemists embodied in Clause 3.

Sir Harry Hornby asked: How would you deal with a limited company consisting of seven qualified men? Would you allow them the title of chemist?

Mr. Wells replied that as a matter of principle they could not do so; and Mr. Gifford said it amounted to this—that a limited company could, by Clause 2, become chemists and have a right to the title by simply employing a qualified man, but an unlimited company could not describe itself as a chemist, nor could a private individual do so even though a qualified chemist was employed.

Sir Harry Hornby sympathised with the deputation, and expressed the opinion that it was most illogical that a limited company could do what an individual might not do. He asked what steps were being taken by the Pharmaceutical Society, who could bring influence to bear on the minister in charge of the Bill.

Mr. Gifford said the Society was acting in the matter, and that that deputation was moving in harmony with the Council.

The deputation next interviewed Mr. Rutherford, who asked many pertinent questions, argued each point as it was brought forward, but finally said it was unfair that a limited company should be able to do what an individual might not do. Mr. J. Booth said they were not seeking protection or a monopoly as traders. All that they asked for was that their title of chemists should be protected. They were fighting for a principle, and it was impossible for the State to go back on its bargain after chemists had complied with the conditions laid down. Mr. Shorrocks and Mr. Parkinson pointed out that the training-ground for young men who desired to become pharmacists was slowly but surely disappearing, owing to limited companies being able to absorb the privileges and rights of qualified chemists.

AN M.P. ON THE BILL.

From the letters which we have received we can only quote one, and that because a special interest attaches to it, the writer being a member of Parliament who has acted as a director of a drug-company. In that capacity he, however, brought knowledge of the business to bear upon his duties, as he is a registered medical practitioner:—

February, 27, 1900.

DEAR SIR,—I received your letter two or three days ago, and I have been considering how to put the amendment that you suggest. It seems, from what Mr. Ritchie says, that the Government would oppose the amendment in the form in which you have drafted it—that is, as far as the present stores are concerned. The Army and Navy, Civil Service, and other Stores throughout London do not carry on the business of chemists and druggists. They have a drug-department where they sell poisons, and the salesmen are all, or should be, duly registered pharmaceutical chemists. Is it your object to secure that the directors of such general stores as those I have named should be registered chemists and druggists? Because, if so, there is not the smallest chance of such an amendment being carried in the House of Commons. But if it is to prevent special drug-stores which deal in drugs only being established by men who are not chemists and druggists, then I think there would be a chance of such an amendment being carried, or, at any rate, an amendment of that kind could be fairly discussed. There would be no chance of attacking interests already in existence. Kindly let me know what your ideas are on the subject. A clause destroying the drug-departments of general stores selling poisons and general preparations by qualified assistants would have no chance of being passed by Parliament. If you were destroying any legitimate business of this kind you would have to give compensation, and where would your compensation come from?

I am, yours faithfully,

Our correspondence includes several letters promising support, and there seems no doubt that a good fight could be made on behalf of the trade.

THE total amount of opium imported into Hangchow in 1898 was 992 10 piculs, showing a slight increase of 12·50 piculs. It consisted almost entirely of Malwa opium, valued at 91,363/.

Many Pharmacy Bill.

IN the Legislative Council of the Isle of Man on February 22, the Pharmacy Bill was considered, the new company clause introduced by the House of Keys being discussed. This clause is in the following terms:—

No company may carry on the business and use the description of chemist and druggist unless such business, and each branch thereof, is *bona fide* conducted by a manager or assistant being a duly-registered pharmaceutical chemist, or chemist and druggist, as the case may require, and unless the name of the person so qualified is conspicuously posted in the shop or other place in which the business is carried on, but subject to this provision—anything which would be an offence under Section 6 of this Act if committed by an individual, shall be an offence if committed by a company.

The Attorney-General pointed out that under Clause 7 the person who sold was liable. The decisions in England under a clause of analogous terms were that it did not apply to a company. He (the Attorney-General) did not understand this provision—no company shall carry on business unless the business is managed by a qualified man. That was to say, not as heretofore, would it be sufficient for a company to have a qualified man selling at the counter as an assistant, but he must be a "*bona-fide* manager"—whatever that might mean. He thought an expression like that would lead to very great litigation.

Deemster Sir James Gell thought it was right that the name of the qualified man should be published in the chemist's shop.

The Attorney-General said it was intended by that provision that a person should be in a position, if he was made that way, to test it on the spot by reference to a register, but when it came to management, what was the definition of "management"? How far was the concern to be handed over to the qualified person? What was his controlling power? Was he not to be subject to the control of his directors? What did "manager" mean? The clause, at the end, went on to say:—

Anything which would be an offence under Section 15 of the Pharmacy Act if committed by an individual, shall be an offence if committed by a company.

That seemed to make it illegal for a company to keep a shop at all. The offence under Section 15 was selling or keeping open a shop. If the company sold and kept open a shop, even though they had a manager in it who was qualified, that would be an offence.

Deemster Kneen: Still, it is a thing that should be dealt with.

The Attorney-General: Yes, but this does not deal with it.

The Receiver-General: I suppose the idea is that a manager should be responsible for the people under him.

The Attorney-General: Anybody there who sells must be qualified. I do not think, if you had a qualified assistant, you could let the shop-boy sell poisons. This is the first time I have seen the amendments, since they appeared in the paper.

The Deputy-Governor (Sir Alured Dumbell) suggested a conference.

The Attorney-General: It is a public Bill, but one in which certain parties took a special interest. They appeared in another place, but we have not had the advantage of hearing them here.

The Deputy-Governor: No, I am glad to say we have not. (Laughter.)

The Attorney-General: If they approached me outside and showed me, it might come to the same thing. I move with regard to that clause that we disagree with the Keys under the circumstances.

Deemster Kneen: With a view to a conference, we ought to deal with it.

The Attorney-General: Personally I am not opposed to the principle.

In sub-section 9, line 44, the Keys had struck out the word "section," and inserted "act."

The Lord Bishop said it had been done by mistake.

The Council disagreed.

The Keys had made certain additions to the schedule of poisons. The Attorney-General explained in reference to this that the terms of the Bill enabled any new poison added in England automatically, to be *ipso facto* added in the Island. He asked if the poisons suggested to be added [phosphorus, hydrochloric acid, sulphuric acid, sulphate of copper, chlorine and its compounds, red oxide of mercury and ammoniated mercury and their preparations, and carbolic acid] were passed by the Pharmaceutical Society. If they were, clearly they were not passed by the Privy Council. He could understand how far the inclusions would embarrass the general trade without expert advice, and moved that the Council disagree. Deemster Kneen seconded, and the motion was carried.

The Deputy-Governor instructed the Secretary to ask for a conference on the Bill.

AN ARRANGEMENT.

In the House of Keys on Tuesday, March 6, the Speaker reported that the Legislative Council had disagreed with the whole of the Keys' amendments to the Bill, and asked for a Conference. Messrs. Jonghin, Cowell, Crellin, Goldsmith, and Kerruish were appointed, and had a long interview with the Council. On their return, Mr. J. T. Cowell reported that the Council disagreed with the Keys' amendment purporting to make companies equally liable with persons for offences under the Act, and had pointed out the clumsy wording of the amendment, which had been copied from a measure before the House of Lords. The Conference had not given way, so to meet the views of the House the Attorney-General suggested the drafting of a new clause instead of that the Keys inserted. This was subsequently accepted, and the Bill was passed in a slightly modified form. As to extra poisons scheduled by the Keys, the Council had pointed out that the effect of the inclusion might be prejudicial to the drug-trade, and that there were already provisions in the Bill that any poisons scheduled by the Privy Council should automatically be included under this Bill.

Trade-Marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form J, cost 1*l.*, obtainable through any money-order office.

(From the "Trade Marks Journal," February 28, 1900.)

Signature of applicant; for mineral, &c., waters. By John Campbell, Mill Wynd, Perth. 227,778.

Device of St. Mungo; for mineral and aerated waters. By Brown Brothers, 41 Washington Street, Glasgow. 227,950.

"AYEWA"; for mineral and aerated waters. By the Lagos Stores (Limited), 6 Stanley Street, Liverpool. 228,243.

Signature, &c., on label; for mineral and aerated waters. By W. J. Briggs, 23 Pine Street, Donegall Pass, Belfast. 228,462.

Device of lion rampant; for toilet-soap. By Hodgson & Simpson, Calder Soap-works, Wakefield, Yorks. 227,909.

"BUNGALOW" and "PAROLE"; for perfumery and toilet-articles. By E. Cooke & Co. (Limited), East London Soap-works, Bow, E. 228,257, 228,529.

"GLOBE," and device of globe (which are the essential particulars) for polishing pastes, powders, &c. By Fritz Schulz, jun., 44 Kaiser Wilhelmstrasse, Leipzig. 222,798.

SOSON is the name of a new albuminoid nutrient, introduced by R. O. Neumann; and *Plasmon* the name of another, introduced by Siebold, of Neubrandenburg.

A SUBSCRIBER IN CANADA (5/20) writes on February 3, "I may say that I have all your publications and consider them as part of my stock in trade—in fact, I could not get along without them, as they are referred to daily."—W. P.

Observations and Reflections.

By XRAYSER.

M.P.'s AND CLAUSE 2.—It is gratifying to observe that the action taken by the *C. & D.*, backed up as it has been by subscribers all over the kingdom, is bearing fruit. The education of the House of Commons on a technical point is a large undertaking—larger, perhaps, than it seems, or than it would be if the members were merely ignorant. It has to be remembered that most of them are prejudiced as well. But the process is going on, as the quotations from M.P.'s' letters, published last week, show. The protection of the title, I have no doubt, is by this time ensured. Nobody, not even the director of four railway companies, who contests the rest of the circular has a word to say in defence of the felonious intention of Clause 2 in that particular.

* * * *

THE WRITER OF THAT LETTER (the director of four railway companies) is, it may be feared, far too accurate in his statement that "in all ordinary companies the employes are the real managers." In a sense this must be the case in businesses such as that of railways, though still I hope the four companies which this M.P. nominally directs in association with others are somehow the better for his supervision. But why is he on those boards? The only sound reason should be that he is an expert on railway matters; that if there were such a thing as a railway examination he could pass it. The circumstance that the Legislature has expressly demanded that the owners of pharmacies, the persons responsible to the public, shall be qualified by examination, is the crucial point which, as was shown in the editorial last week, this M.P. overlooks, and which makes the essential difference between pharmacies and railways. Of course, logically, if this essential difference is insisted upon, companies ought not to be allowed to own pharmacies at all, and if the M.P. prefers to be strictly logical, chemists at least will not quarrel with him.

* * * *

THE FEDERATION CIRCULAR, with which I hope members of Parliament are now being bombarded, is, I am glad to find, expressed in the same sense as its predecessor from the *C. & D.* office. Better than absolute apathy in the presence of the great opportunity which this Companies Bill affords, would be contradictory claims, but of course if anything approaching unanimity can be arrived at, the prospect of success is infinitely improved. It now only remains for the Council of the Pharmaceutical Society to take a similar line, and perhaps they will do so even yet. Then the Lord Chancellor and Mr. Ritchie would certainly conclude that they could not carry Clause 2 in its present form, and they might be induced to amend it in such a way as would give us substantial justice. The action of the Drug Companies' Association (Limited), reported in last week's *C. & D.*, will perhaps stimulate the Pharmaceutical Council to a policy of some sort.

* * * *

"FORTY YEARS OF BRITISH TRADE" is a very concise and instructive review of our commerce in the *Contemporary Review* for March presented by Mr. Michael G. Mulhall, a name which seems redolent of statistics. It is only from a survey of some such extended period as is covered by Mr. Mulhall's compilation that fairly accurate deductions can be drawn from the often misunderstood figures of the Board of Trade's returns. The totals in these tables are, of course, magnificent. The United Kingdom bought and sold 24,723 million pounds' worth of goods in the course of those forty years. Of this bulk of business, 10,851 millions were done

with Europe, 4,192 millions with the United States, 6,043 with British colonies, and 3,637 with other countries. These are totals of imports and exports, and Mr. Mulhall points out that, as we buy as well as sell for our own advantage, the total of both must be the measure of our prosperity. But he so far panders to the popular prejudice in favour of exports as to show them separately. During the forty years British (total) trade has grown most rapidly with the United States, rising from the standard of 100 in the sixties to 246 in the nineties; with Europe progress in the same period was from 100 to 167, with the British colonies from 100 to 157, and with the world generally from 100 to 163.

* * * *

EXPORTS have developed, in proportion, more with the British colonies than with the rest of the world but the theory that "trade follows the flag" is not entirely supported by this review. Australian and Canadian purchases from Great Britain have been declining during the past twenty years, though in both cases their sales to us have grown immensely. Britain's trade with Egypt was progressing satisfactorily up to the time of the British occupation of that land, but since that epoch both imports and exports have fallen steadily and are now 25 per cent. lower in both cases than before England controlled the affairs of the country. Germany, who is our best European customer, bought more from us than she sold to us until 1888, but since that date the balance has been the other way. We are increasing our purchases from France and selling less to her. Spain is an improving customer, Italy is not. Germany is supplanting us in South America, China is buying more but selling much less to us, but with Japan our trade has quadrupled in the forty years. From the United States we have bought 1,680 million pounds' worth of goods more than we have sold to her during those forty years, and how have we settled the difference? Not only have we paid nothing in cash, but during the same period the United States has actually sent us 209 million pounds' worth of bullion more than she has received from us; a poser for those economists who see England's commercial ruin in this growing balance of trade against us.

* * * *

THE CUTTING OF MEDICAL FEES is, in essence, though not in so many words, advocated, or at least approved, by the *Physician and Surgeon*. "We do not see any sound reason," writes the Editor, "why the beginner should restrict his charges to the tariff adopted by his long-established and successful colleague in the district." The latter, it is argued, is quite justified in fixing his scale of remuneration, but it is not clear why the younger man with his way to make should begin where the other leaves off. Indeed, it is a question whether it is quite just and honest that he should do so, as his services might fairly be appraised at a lower rate than those of his more experienced rival. The force of this reasoning, which is obvious, only makes it so much the more dangerous from a professional-etiquette point of view.

* * * *

CONTINENTAL PHARMACISTS are sublime on the subject of *la spécialité*. The French chemist who has devised a new *dragée* or mixture comes quickly to believe in himself as a modern Paracelsus, and when he reads the *réclame* concerning his invention on the fourth page of his favourite journal, notwithstanding that it has been written up from his own statements and is paid for by himself, he is fully convinced of the debt the world owes to him. Other people's specialities he denounces warmly and, since the profit on them has been cut to the bone, indignantly. He insists on a law to suppress them, regardless of the one already in existence. Any French law-book will tell us that the sale of medicinal compounds not in the Codex or approved by the Academy of Medicine and of all secret medicines whatever is rigorously prohibited. That law looks all right in print, but how can it be reconciled with those tickets referred to by the *C. & D.* Paris correspondent, which declares that "the pharmacist declines all responsibility for specialities of which the formula is unknown?"

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Editorial Comments.

Pay! Pay! Pay!

SIR MICHAEL HICKS-BEACH has had an exceptionally early
opportunity of informing the country what our latest little
war is to cost us, and, as was anticipated in THE CHEMIST
AND DRUGGIST as far back as February 3, income-tax,
spirits, beer, tobacco, and tea are the liquidators of the debt
so far created. Elsewhere in this issue we give a full state-
ment of the alterations of taxes on produce imported
into or produced in this country which are affected by the
Budget, and it happens that the new taxes touch more
articles handled by retail and wholesale druggists than by
any other trade.

While recognising that the dropping of the income-tax
shilling into the national tambourine was inevitable, and
even desirable, we cannot work up any enthusiasm as to the
brilliance of the Budget in other respects; indeed, we con-

sider that the taxation of produce contract-notes by means of a 1s. stamp is a distinctly retrogressive proposal, for produce is not at all comparable with Stock Exchange scrip, and the cost of the stamp must ultimately be borne by consumers. It is a small thing, but the principle in its application to articles of common consumption is bad. The Chancellor of the Exchequer has given no reason for imposing it, except that many transactions on the Produce Exchanges throughout the country are similar to transactions on the Stock Exchange, which is true of some transactions in metals, coffee, wheat, quinine, and other produce; but the bulk of the contract-notes deal with genuine sales of necessities, and they should be made as free as possible. It will be noted that this part of the Budget has still to receive the sanction of Parliament, and the traders interested may be able to induce the Government or Parliament to forego the 150,000*l.* which it will bring in. The Chancellor has consented to receive a deputation from the Mincing Lane trade.

Sir Michael Hicks-Beach is undoubtedly wise in collecting his increased revenue mainly from the great tax-yielders, but his method of doing it is far from clever. The comparatively small increases on beer and spirits throw the payment of these taxes upon the retailers. This may be intentional so far as public-house keepers are concerned; for these gentlemen can buy lighter beer and dilute spirits down to a certain limit in order to recoup themselves. But the retail chemist has no elasticity of that nature for the articles which he handles, and he must now pay 1*d.* to 2*d.* per lb. more for a large number of articles without much chance of getting an increased ounce-price for them on retailing. We reckon that each retail chemist will thus pay to the Revenue 2*l.* 10*s.* per annum more, in addition to what he must pay in increased income-tax and the taxes on commodities, but the 6*d.* means much more to chemists with large retail business, perhaps as many pounds as there are shillings in the above average. The avoidance of a greater increase on the beer and spirits duties appears to be dictated by political expediency—the fear of hurting the feelings of the consumer—i.e., the man in the street, who is willing to pay his share of the little war, but is only called on to do so to the extent of a shilling a year or so for his tea and the sacrifice of a few score of farthing boxes of matches hitherto given to him as change on his tobacco-purchases. It is a poor Budget—poor in conception, in courage, and in trust of the people.

Sold Again.

YES, again. About this time twenty years ago, when the company difficulty was hurled back upon the Pharmaceutical Council by the House of Lords, the sages of Bloomsbury trifled away the opportunity of getting by legislation what they had failed in by law. This performance has been repeated on several occasions since, but when the Government provided in the Companies Bill an even better opportunity than any previously offered, we, in common with other chemists and druggists, hoped that the Pharmaceutical Council, which really seemed to regret past indecision, and said so, would endeavour to make up for lost time. As we all know, the Council has been the tool of a committee during the past four months, for the members of the committee have been "slim" in procedure, and no action, saving an independent and personal effort of the President, has been taken to secure support of Parliamentarians to legitimate pharmaceutical views on the company question. This culminated on Wednesday, when the Council deliberately defeated a proposal to try to mend Clause 2 of the Bill before ending it. So we have the spectacle of the constituted pharmaceutical authority of Great Britain declining to face

the music. What can be said of such a body? It receives the guineas of some thousands of business men, who expect that the Council and officers will look after their interests. That many of these subscriptions are imperilled will be obvious to the veriest tyro in the doctrine of cause and effect, but the Council itself first requires attention. For years we have exposed the folly of returning year by year the same men to the Council. For practical purposes the Council of to-day is constituted similarly to that of twenty years ago. It is true new men have been returned, but almost always by instalments of one or two—and principally as nominees of the outgoing Council. When on rare occasions a man has been returned who was not a Square candidate, and we were led to expect great changes, we have been disappointed—the new man's individuality has not enabled him to withstand the temptation to row with the stream. We have heard more than once from the chair that a few months' experience of the inner workings of the Council and its committees has convinced these would-be reformers that everything is being done for the best. Mr. Glyn-Jones, the only new man returned last year, has launched a strong indictment against his colleagues. He charges the Council with bungling and incompetence in the company question. We hope the Society's members will benefit by this lifting of the veil, and will take care that a reasonable proportion of new men are added to the Council in May. Men are wanted who are not steeped through and through with "Square" traditions, who will go to the Council determined to think and act for themselves, who will regard the Council as a body of men to whom is entrusted the legislative and administrative functions of an important Society. It is clear that at the approaching election the particular views held by the various candidates upon this or that phase of pharmaceutical politics is not so much a matter for consideration as that they have reasonable views, and especially sufficient grit to ensure that their views shall be fully and openly discussed, and that intelligent action shall be the outcome of such discussion.

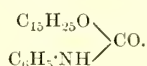
The confidence expressed in the Council by its members from time to time has been unbounded, but the secrecy of the Council's proceedings has hitherto been of the greatest assistance in fostering such misplaced confidence. How often have we heard the expression, "Oh! the Council is doing more in this or that direction than its members have thought wise to make public. We must trust our leaders." The folly of such blind faith has been clearly demonstrated this week. What is now wanted is a fresh set of leaders. It is the duty of every member to make the fullest use of this opportunity to replace men who have shown that, whatever qualifications they possess as eminent pharmacists, they are helpless as legislators. The fact that this can only be done to a fractional extent this year is all the greater reason why no mistake should be made in ensuring that some new men are returned. Some of those who voted against the ending process on Wednesday are now retiring. We should not like to lose their experience, but they should have a good backing when they are sent back to Bloomsbury.

Sandalwood Oil.

DURING the past few years the chemistry of this important oil has attracted considerable attention, and contributions to our knowledge of the oil have appeared somewhat frequently recently, the last being published in the current issue of the *Journal de Pharmacie et de Chimie*; and as this paper brings us to an important point of our knowledge of the subject it will be advantageous to recall past work

that has been done. The earliest serious investigator was Chapoteaut, who, in 1883, stated that the oil consisted chiefly of an aldehyde, $C_{15}H_{24}O$, which he termed santalol, together with a certain quantity of an alcohol, $C_{15}H_{26}O$, santalol, the two bodies being probably related in the same way as ordinary aldehyde and alcohol. The constitution of the oil was not again investigated until 1895, when E. J. Parry pointed out that Chapoteaut's work was unreliable, as he had examined an oil of sp. gr. 0.945, and which could not, therefore, be pure. Parry also showed that if any aldehyde were present, it could only be in very small quantity, and proposed to value the oil by converting the alcoholic constituents into their acetic esters and quantitatively saponifying. He thus proved that the main portion, about 90 per cent., of the oil consisted of one or more alcohols. At the same time he showed that the oil contained a small quantity of esters—approximately 5 per cent., calculated as santalyl acetate. The next contribution was that by Chapman and Burgess, who claimed to have isolated the aldehyde santalol by fractional distillation, and prepared by oxidation from it a crystalline acid. No evidence was given of the purity of the alleged aldehyde, and its existence has later been denied by Soden and Müller. Last year an important contribution to the question was made by the chemists of the firm of Schimmel & Co., of Leipzig. They agreed that the so-called "santalol" was not a chemical individual. The method of examination adopted by them was as follows: The oil was heated in benzene solution with phthalic anhydride, and the resulting phthalic-acid esters were found to be soluble in alkali. The aqueous alkaline solution was freed from non-alcoholic bodies by extraction with ether, and then the esters were saponified by boiling with alcoholic potash, and the "santalol" separated and washed. The santalol was then fractionated under a very much reduced pressure, and the compound nature of the product was at once revealed by the fact that the various fractions possessed sp. grs. and optical activities greatly differing from one another. The conclusion arrived at by these investigators was that there were at least two alcohols present—that with the lower boiling-point being optically inactive or slightly dextrorotatory, and that with the higher boiling-point being highly levorotatory. The santalyl-phthalic acid could not be induced to crystallise, but after much difficulty its silver salt was obtained in a crystalline condition, and was found to melt at 50° .

In the same year Soden and Müller confirmed the statement that santalol was not a homogeneous body. They also stated that they had separated a sesquiterpene boiling at 261° C. and having a sp. gr. of 0.898 and an optical rotation of -21° , which could not be identified with any known sesquiterpene. These chemists also stated that sandalwood oil contained a large number of subsidiary bodies which were practically uninvestigated. They gave the following as probable constituents: A phenol, lactone-like bodies with a fruity aroma, an acid melting at 154° , and borneol. At the commencement of the present year E. J. Parry announced the discovery of a well-defined crystalline compound of an alcoholic constituent of the oil, which possessed the extraordinarily high melting-point 237° C. This body is the santalyl ester of phenyl-carbamic acid formed by the direct combination of phenyl isocyanate and the alcohol present in the oil. This body, according to Parry, has the constitution



Following on this comes the latest contribution referred to—a paper by Guerbet. Guerbet again confirms the complex nature of the alcoholic constituents of the oil, usually

referred to as santalol. He states that he is in agreement with the figures given by Parry both as regards the quantity of esters and alcohols present in the oil. The preliminary method of separation adopted by Guerbet is a series of fractional distillations with a Le Bel-Henniger column under a pressure of about 40 mm. The main constituents of the fraction, which was obtained at a temperature of 110° – 180° C., were hydrocarbons; between 180° and 200° the bulk of the oil was distilled and found to consist almost entirely of alcohols. The residue was of honey-like consistence, and of a dark-brown colour. The hydrocarbon fraction was repeatedly fractionated, finally being rectified under ordinary pressure over sodium. Two chief fractions were obtained, which the author regards as sesquiterpenes, although he gives no evidence in support of this assumption. He terms them santalene α (boiling at 252°) and santalene β (boiling at 261°). He also considers that there are present traces of a hydrocarbon (0.2 to 0.3 per cent.) boiling at 130° – 140° , and an oxygenated body boiling at 210° – 220° . The alcoholic fraction, examined by Parry's process, gave a result equal to 97 per cent. of santalol. The process adopted for investigating these alcohols was the same as that used by Schimmel's chemists—namely, Haller's method with phthalic anhydride. By fractionation of the pure alcohols under reduced pressure, Guerbet obtains fractions of very varying optical rotations. Whilst Schimmel ventures to give the optical rotations of the two alcohols as practically 0° and -32° respectively, Guerbet contents himself with giving the optical rotations of his fractions as varying from -9.4° to -25.3° . He concludes that there are therefore two alcohols present corresponding to the two sesquiterpenes (which are both levorotatory—viz., -14° and -28.30°). So far these results confirm all previous ones, but they do not take us any further in the question of isolating any one of these bodies in a proved state of purity. The acids yielded on saponification of the oil were also examined. Guerbet states that the soluble acids obtained consisted of acetic acid with the merest traces of formic acid. An insoluble acid was also obtained which possesses the formula $C_{16}H_{14}O_2$, and melts at 90° . He proposes to call this acid teresantallic acid. A second insoluble acid was also obtained, of the formula $C_{15}H_{24}O_2$, which he terms santalic acid. He also states that he has isolated the aldehyde santalol, $C_{15}H_{24}O$, which Chapoteaut claimed to be the chief constituent of the oil. It occurs to the extent of 3 per cent. The following, then, are the properties of the various bodies which are said to be present in this oil:—

- (1) Santalene α , $C_{15}H_{24}$; sp. gr. 0.9134; rotation, -13.59° ; b.p., 252° .
- (2) Santalene β , $C_{15}H_{24}$; sp. gr. 0.9139; rotation, -28.55° .
- (3) Two santalols, whose properties are not yet sufficiently well known to be stated with certainty.
- (4) Santalol, $C_{15}H_{24}O$, boiling at 180° under a pressure of 40 mm.
- (5) Santalic acid, boiling at 210° at 20 mm.
- (6) Teresantallic acid, $C_{16}H_{14}O_2$, melting at 157° .
- (7) Various unknown bodies.

These results taken together give us an exceedingly good insight into the composition of this oil, but much still remains to be done. Much of the difficulty in the way of investigating this oil with success depends, no doubt, on the failure to prepare crystalline compounds from it; but these difficulties are gradually disappearing, and no doubt further interesting results will be published ere long with so many chemists engaged on the work.

"MUM."

Wily Carteighe quite *ex parte*
Took to lying rather low,
Put up Newsholme to amuse 'em
And, if possible, confuse 'em,
So, as usual, flanked the foe.

A NEGLECTED POISON.

The case of corrosive-sublimate poisoning which we report this week suggests that this fearful poison and most useful antiseptic is being regarded too much from the utility side, and, consequently, sufficient care is not taken with it. An instance of this was provided in the Roscommon case recently (*C. & D.*, February 24, page 316). It was deposed at the inquest by Mr. Robert Walker, an assistant in "Miss Jones's establishment," where the "supplement" was obtained by the man who afterwards swallowed it, that he sold 2 oz. of the poison and the same of spirit of salt, putting them in a bottle *without any special label*. There are no poison-regulations in Ireland, but the law as to labelling is exactly as in Great Britain, and this case is one that the Irish Pharmaceutical Council cannot overlook. A lesson is apparently required.

WARRANTIES ON INVOICE.

Mr. Beck, the solicitor to the Federation of Grocers' Associations, has prepared the following statement of the conditions which constitute a warranty:—

(1) Where the invoice relates to any one article, the words "guaranteed pure" should be used.

(2) When several articles are included in the same invoice, the words "all articles included in this invoice are guaranteed to be pure" should be used.

(3) The words of guarantee may be affixed to the invoice by an india-rubber stamp or some similar means, and it is desirable that the names or initials of the firm be added.

(4) That such steps as are possible be taken to induce the wholesale trade to adopt such guarantees as a regular system of business.

The members of the Association have been recommended to insist that all sale-notes or invoices of articles purchased as pure should bear one or other of these words of express guarantee. What is good for the grocer is good for the chemist.

PERISHABLE MEDICINES.

We reported briefly last week the case against Mr. F. H. Neale, chemist, Herne Bay, for selling spirit of nitrous ether said to be adulterated. We have since learned that Mr. Potter, of Birmingham, who appeared for the defendant, submitted that the analyst's certificate did not state whether any change had taken place in the constitution of the sample. Mr. Potter contended that spirit of nitrous ether is a perishable article just as milk is, and he so satisfied the Bench on this point that they considered it to be an article liable to decomposition, therefore the case fell to the ground. The Bench added that the Public Analyst would be informed of the matter in order that he might be more careful in future in making out his certificates. As this decision should be taken advantage of fully in the future we may mention that it was given at St. Augustine's Petty Sessions (Kent) on February 24, Mr. W. Pomfret presiding, the other Magistrates on the Bench being Captain T. Lambert, General Degacher, C.B., Dr. E. C. Fenoulhet, Mr. J. Bowes, Mr. F. H. Wilbee, and Mr. A. Collard.

UNIVERSITY OF LONDON.

The Regulations made for the University of London by the commissioners appointed under the 1898 Act have now been issued, and give all the particulars which we printed in *THE CHEMIST AND DRUGGIST* on September 9, 1899, page 455 (Vol. 55). It will be remembered that under these Regulations thirty-two distinct Boards of studies are appointed, including Boards for the three stages of medical studies, a Board of dentistry, one of pharmacy, one of chemistry and chemical industries, and so on. The Regulations also provide for the degree of B.Sc. being obtained by thesis after passing the Intermediate examination. This is a special provision for research-students. There are to be internal and external

students of the University, the latter continuing the old style and the former being pupils of recognised teachers. A list of such teachers at the various medical schools, dental, pharmaceutical, and scientific institutions in London is given; thus Professors Green, Collie, and Greenish, of the Pharmaceutical Society's school, are recognised respectively as teachers of chemistry, botany, and pharmaceutics. It seems to have been this recognition which inspired Mr. Carteighe's optimistic remarks a fortnight ago regarding a degree for pharmacists; but there is no reason why other schools of pharmacy in the country should not be recognised if they conform to the Regulations. As far as we can observe Professor Greenish is the only teacher of pharmaceutics recognised. The term is rather a pretty one, and we congratulate the professor on the distinction thus conferred upon him. Mr. Carteighe attributed the invention of the word pharmaceutics to Sir Michael Foster, but while the suggestion may have come from him the word is an exceedingly old one, and the science of pharmaceutics has generally been considered to be the equivalent of the art of pharmacy.

THE VOGELER COMPANY.

We announced a few weeks ago that the failure of the owners of this company in the United States did not affect the English branch of the business. It is but right that we should explain certain proceedings which have since taken place, especially as a Baltimore paper has intimated that bankruptcy proceedings have been instituted against the company in the English courts. When the American failure occurred Mr. W. E. Geddes, the European manager, was cabled to forward all funds held by him up to a certain date. This, we are informed, he, acting under legal advice, declined to do, and while negotiations were pending the English creditors of the company, through a well-known Midland firm, applied to the London Bankruptcy Court for a receiving-order. Upon this Mr. John Morgan Richards was appointed by the Official Receiver to take charge of the London business, Mr. Geddes being retained to superintend the manufacturing-department. In due course the application for the receiving-order came before the Registrar who refused it. We learn that the ground of the dismissal was that the American business had been taken over by Mr. Dulaney, of Baltimore, and therefore that there was no act of bankruptcy; but we also hear that the fact that the owners of the business were not domiciled in this country, and therefore were out of the jurisdiction of the Court, weighed with the Registrar in refusing the receiving-order. The matter did not rest there, as the petitioning creditor carried it to the Court of Appeal, and on February 23 three Judges, including Justice Vaughan Williams, one of the highest authorities on financial law, sustained the Registrar's decision. Mr. Geddes's engagement with the company, extending to twenty-four years, was terminated forthwith, and a new manager has taken his place—Mr. Richards, of course, retiring from the friendly position which he had assumed. We are informed that the English creditors of the company are exactly on a footing with those in the United States; but the new manager confidently hopes that they will be paid penny for penny what is due to them. The facts suffice to show that there is a considerable element of risk in dealing with branches in this country of foreign firms who are merely represented by agents, as it appears that under certain conditions the estate here cannot be dealt with by the English Courts, so that English creditors must suffer the English assets to be pooled with those outside the country, and be content with their share of the whole. This applies generally, of course, to foreign firms who are merely represented in this country by a resident agent, and the fact is worth bearing in mind.

Westminster Wisdom.

SHOP HOURS.

A Bill "to amend the Shop Hours Acts" was presented and read the first time on Wednesday. It is to be read a second time on Friday, April 27.

THE EARLY BUDGET

has upset all calculations as to business in the House of Commons. Mr. Balfour surprised the House on Friday evening, March 2, by announcing that the Chancellor of the Exchequer would introduce his Budget on Monday. This is fully a month earlier than usual, but not an unprecedented event, and it appeared to be necessary, owing to the large withdrawals of dutiable goods from Customs and Excise warehouses. So it was speculated, and the event has proved the correctness of the speculation. Sir Michael Hicks-Beach rose on Monday afternoon about half-past 4 to make his statement. Considering that the financial year is not yet at an end, and that the war-expenditure has dictated the early Budget, the speech was devoid of the usual catchy statistics about the habits of the people with which Exchequer Chancellors are accustomed to lard their phrases, while the revenue of the year was actually estimated—the figures given were 116,040,000*l.* at least, but a million or two may have to be added to that arising from the enormous quantities of tea, tobacco and spirits taken out of bond on Saturday and Monday. The year 1899 was exceedingly prosperous, the Chancellor said—a fact known before—and it is reflected by increased consumption of beer, spirits, and tea; "tobacco and wine have not done so well." The expenditure for the year will be 17,770,000*l.* more than the revenue, owing to the war. This brought the members within distance of what they wanted to know—the expenditure of the next financial year, and how it is to be met. Sir Michael quickly got to that. By 5 o'clock he was juggling tens of millions as if they were oranges. To put it briefly, the expenditure next year will be 154,082,000*l.*, and taxation at the present ratio will yield 37,182,000*l.* less than that. With the deficit of the year and 5,000,000*l.* for naval and military contingencies, there is another 59,952,000*l.* beyond the 116,900,000*l.* to be found somewhere. The Chancellor finishes it thus:—

By borrowing	£13,000,000
Suspending debt repayment	4,640,000
4 <i>d.</i> on income-tax	6,500,000
6 <i>d.</i> per gal. on spirits	1,015,000
1 <i>s.</i> per barrel on beer	1,752,000
4 <i>d.</i> per lb. on tobacco and 6 <i>d.</i> per lb. on foreign cigars	1,100,000
2 <i>d.</i> per lb. on tea	1,800,000
New stamp-duty (1 <i>s.</i>) on produce contract notes	150,000

"Statesmanlike and courageous" was the opinion of the leader of the Opposition on the Budget, and the House quickly set to work on

THE NEW TAXES.

Tea.—On a division (ayes, 209; noes, 60) it was agreed that the duty should be 6*d.* per lb.

Tobacco.—The proposal was to add the following to the Customs-duties:—

6 <i>d.</i> per lb. on cigars, making it	5 <i>s.</i> 6 <i>d.</i>
6 <i>d.</i> per lb. on cavendish, making it	4 <i>s.</i> 4 <i>d.</i> and 5 <i>s.</i>
5 <i>d.</i> per lb. on cavendish manufactured in bond, and on other manufactured tobacco, making it	3 <i>s.</i> 10 <i>d.</i> and 4 <i>s.</i> 5 <i>d.</i>
5 <i>d.</i> per lb. on snuff with 15 gr. moisture, making it	3 <i>s.</i> 7 <i>d.</i> and 4 <i>s.</i> 2 <i>d.</i>
6 <i>d.</i> per lb. on snuff with more moisture, making it	4 <i>s.</i> 4 <i>d.</i> and 5 <i>s.</i>
4 <i>d.</i> per lb. on manufactured tobacco, making it	3 <i>s.</i> to 3 <i>s.</i> 10 <i>d.</i>

After ineffectual amendments by the Irish members the proposal was agreed to.

Spirits.—The proposals under this heading were intricate. First, the Excise-duty was proposed and agreed to be raised by 6*d.* per proof gal, making the duty 11*s.* per proof gal. Second, the Customs-duties on imported spirits (brandy, rum, Geneva, and others) by 6*d.*, making the duty 11*s.* 4*d.*, on perfumed spirits, by 10*d.* (now 18*s.* 1*d.*), and on liqueurs, &c., by 8*d.* (now 15*s.* 4*d.*).

Third, the following articles were increased to the stated duties:—

Chloral hydrate (per lb.)	1 <i>s.</i> 4 <i>d.</i>
Chloroform (per lb.)	3 <i>s.</i> 3 <i>d.</i>
Collodion (per gal.)	£1 6 <i>s.</i> 3 <i>d.</i>
Ether, acetic (per lb.)	1 <i>s.</i> 11 <i>d.</i>
Ether, butyric (per gal.)	16 <i>s.</i> 5 <i>d.</i>
Ether sulphuric (per gal.)	£1 7 <i>s.</i> 5 <i>d.</i>
Ethyl bromide (per lb.)	1 <i>s.</i> 1 <i>d.</i>
Ethyl chloride (per gal.)	16 <i>s.</i> 5 <i>d.</i>
Ethyl iodide of (per gal.)	14 <i>s.</i> 2 <i>d.</i>

[For old duties see THE CHEMISTS' AND DRUGGISTS' DIARY, 1900, page 261.]

Beer.—The Excise-duty was agreed to be increased by 1*s.* per 36 gals. of worts sp. gr. 1.055, and so on, proportionate to the sp. gr. of worts, making it 7*s.* 9*d.* The Customs-duty on mum, spruce, black-beer, or Berlin white-beer, was increased by 4*s.* per 36 gals. for worts of sp. gr. 1.215, and 4*s.* 8*d.* for worts above for those over (making the duties 32*s.* and 33*s.* 6*d.*), while other imported beers will pay 8*s.* per 36 gals. on the basis of sp. gr. 1.055.

It was agreed in all cases that these duties should come into force immediately (March 6) and continue until August 1, 1901.

No motion was passed respecting the Produce Contract-notes Tax nor Income-tax, as these have to be the subject of Revenue Bills.

THE COMPANIES BILL.

This measure was again in the orders of the day for Monday, but was postponed until March 11. On Thursday, March 1, Mr. Balfour was asked by Mr. Galloway, whether it was intended to take the second reading of the Bill before Easter; and, if so, when?

Mr. Balfour replied, "I hope the second reading may be taken before Easter, but I cannot give any pledge."

Mr. Galloway: Shall we have notice?

Mr. Balfour: Certainly.

Saving Mr. T. P. O'Connor's blocking motion there is yet no indication on the parliamentary papers of amendments of Clause 2, but notice cannot be given of such until the Bill reaches the Committee stage.

SECONDARY EDUCATION.

Replying on Friday, March 2, to the question put by Sir M. Foster, regarding the impending organisation of secondary education (see *C. & D.*, March 3, page 374), Sir J. Gorst said, "The Government is fully alive to the importance of scientific teaching in secondary schools, and will take care that nothing is done in the organisation of the Board of Education to impede its efficiency and progress."

Business Changes.

KNIGHT'S DRUG COMPANY has opened a branch pharmacy in High Street, Brentford.

DURBIN'S DRUG STORES will shortly open branch premises at 13 High Street, Wandsworth.

MR. R. COETMOR JONES, chemist, Carneddi, Bethesda, has opened a new shop at Penrhyn Terrace (facing Station Road), Bethesda.

BOOTS, CASH CHEMISTS (EASTERN) (LIMITED), is the title by which the firm of Messrs. Boots (Limited) will in future be known. The name has been so changed by special resolution of the proprietors, and by permission of the Board of Trade in the usual way.

MR. H. F. BOURNE, chemist and druggist, has purchased the business carried on for the past twenty years at 11 Strand, Torquay, under the title of Guyer & Shapley. Mr. Bourne managed the business during the time that it was owned by the late Mr. Chas. Shapley.

SINCE the painful death of Mr. Fred Lumby, chemist and druggist, of Arkwright Street, Nottingham, the business has been carried on for the widow and family by Mr. George Savage, who had been with Mr. Lumby about fourteen years, going as an apprentice. Mrs. Lumby is disposing of the business. The postal and telegraphic business carried on in connection with it is exceptionally heavy for a branch office, and the worry and responsibility of the postal branch had much to do with undermining Mr. Lumby's health. Deceased had occupied the premises for about twenty years, and was highly respected.

Legal Reports.

Cape Adulteration Act.

GREGORY'S POWDER AND MILK OF SULPHUR.

ON February 6 the hearing of the charges against William Slegs (Hazell & Sons), Cape Town (*C. J. D.*, March 3, page 369), for selling Gregory's powder containing carbonate of magnesia and milk of sulphur containing sulphate of calcium, was resumed.

The Magistrate (Mr. G. Blackstone-Williams, A.R.M.) said accused did not dispute the analysis in the first charge, and had admitted that carbonate of magnesia was cheaper. He believed there was a complete absence of intention to defraud. Defendant had, however, contravened Section 7 of the Medicine and Pharmacy Act, inasmuch as he had not sold Gregory's powder made in accordance with the edition of the British Pharmacopœia in use, and a fine of 10s. was inflicted.

With regard to the milk of sulphur, said to be adulterated with 9 per cent. of calcium sulphate, defendant pleaded not guilty. Accused then described the method of preparation according to the old Pharmacopœias, and said that although the name "milk of sulphur" was in the 1898 edition, it was not in the 1885 edition of the B.P., which was the one still in force. Milk of sulphur and precipitated sulphur were different articles of commerce. A catalogue was produced in court verifying this statement.

Mr. D. K. Petersen, a member of the Colonial Pharmacy Board and of the firm of P. J. Petersen & Co., manufacturing chemists, supporting this evidence, said the sample of sulphur was exceptionally good, because it was not unusual to find as much as 75 per cent. of sulphate of calcium in milk of sulphur made by the old method. He only kept the precipitated sulphur of the B.P. in stock.

Inspector Clark, for the prosecution, then endeavoured to show that calcium sulphate was injurious to health, and forthwith evidence for the defence was given by Mr. A. E. Tothill, chemist and druggist.

Mr. Van Zyl, for the defendant, quoted the case of the Crown v. Mathew (Messrs. Heynes, Mathew & Co., Cape Town), in which an action for defective sweet spirit of nitre was dismissed because sweet spirit of nitre was not in the B.P. He pointed out that the 1898 edition of the B.P. did not come into operation till March 1.

The Magistrate held that Mr. Slegs acted quite within his right in selling the article he did, seeing that the new B.P. had not come into operation, and the case was dismissed.

ON the same date, George Hamilton (of Cameron & Hamilton, chemists and druggists, Cape Town and Salt River) was charged before Mr. G. Blackstone-Williams, A.R.M., with having sold at his Cape Town pharmacy Gregory's powder which contained 62 parts of magnesium oxide and 38 parts of rhubarb and ginger, instead of 67 and 33 respectively.

Sub-Inspector Clarke conducted the prosecution, and Mr. Van Zyl appeared for the accused and watched the case in the interests of the Pharmaceutical Society of Cape Colony.

The Magistrate remarked that to him the difference was inappreciable, and asked the prosecution if they intended to bring evidence in a case of this sort.

Sub-Inspector Clarke maintained that the article ought to be up to the B.P. standard.

Several witnesses were then called, and their evidence taken at considerable length.

Mr. John Müller, an analyst in the employ of the Government senior analyst, said Gregory's powder would not absorb moisture, or only to an unappreciable extent. He would admit 0.4 per cent., and that moisture would be absorbed by the rhubarb and ginger, but not by the magnesia. Witness had found over 3 per cent. of moisture in the sample, but had not put it in the certificate.

Mr. James Herd Millar, analyst and laboratory manager for Messrs. P. J. Petersen & Co., entirely disagreed with the statement that magnesium oxide did not absorb moisture. It was a fact well known to chemists that it was an unstable chemical when exposed to the air, from which it absorbed moisture and carbon dioxide. The Magistrate asked to what extent it would increase in weight, and the witness

replied that, under favourable conditions, it would go on absorbing until 1 oz. weighed 2½ oz.; but that would take a long time. Mr. Millar supported his evidence by the statements in the U.S.P. about absorption, and added that the stiff paper envelope, 6 by 7, used by the police might account for the deterioration. He made a second analysis of a sample taken direct from the original package in the defendant's pharmacy, and found—

Magnesium oxide	...	...	...	65.57 per cent.
Moisture	...	...	...	3.00 per cent.
Rhubarb and ginger, by difference	...	...	...	31.43 per cent.

Questioned if the manner in which the Government analyst had conducted his analysis was the usual one, he replied that it was usual to mention the amount of moisture; the amounts of ginger and rhubarb could only be found approximately by deducting the magnesium oxide and moisture—not by actual analysis.

The Magistrate asked accused why he had not put the powder into a bottle, and he replied that the purchaser said he had one. Defendant said he had imported the powder from Messrs. Burgoyne, Burbidges & Co., London; and the tin and invoice, both marked "B.P.," were produced. Rhubarb was about three times the price of magnesia, and he would be the loser, assuming that the Government analysis was correct.

Mr. Barlow, Messrs. Burgoyne, Burbidges & Co.'s resident representative, said drugs ordered "B.P." were guaranteed so by his firm.

The Magistrate pointed out that the only legal warranty was a specific warranty in writing.

Mr. D. K. Petersen and Mr. F. W. C. Thomas, members of the Colonial Pharmacy Board, corroborated the evidence and statements as to effect of exposure to air. Mr. Petersen was then asked to describe the process of manufacture, which he did. Questioned as to whether his firm made it fresh for every customer, he said it would be impossible to do that.

The Magistrate, in summing up, said it appeared to him that the difference between the proportions in the British Pharmacopœia and those found by the Government analyst were practically very slight. The defence of warranty had been introduced, but the fact of the letters "B.P." being on the invoice was not sufficient evidence of warranty. However, the subject of warranty need not affect his decision in this case. There had been a consensus of opinion on the part of witnesses that there would be no difference in therapeutic effect between the B.P. Gregory's powder and one having the composition stated by the Government analyst. The purchaser was not affected in the sale of this article. In fact, the powder made according to the analysis would be more expensive, so that in this case the purchaser suffered no prejudice. From the evidence it appeared impossible to keep Gregory's powder up to the standard because the occasional opening of the bottle induced change by exposure to the air. There had also been a consensus of opinion that the paper envelope in which the sample was taken for analysis was not a proper package; air had permeated the paper, and might account in one way for the difference between the proportions in the B.P. and those found by the Government analyst, and this was confirmed by the analysis of the two samples by Mr. Millar. There had been no evidence that the powder had not been made according to the B.P., and he believed that it had been made according to the B.P. by Burgoyne, Burbidges & Co., and that it had been sold in the same state in which it was received. He dismissed the case.

The case against Martin Vogelgezang (Cape Town) for a similar offence was withdrawn; also one against a vendor located at Robertson, Cape Colony.

ON February 13 another case against Willem Hendrik Rohm, chemist, Cape Town, was heard by Mr. Blackstone-Williams. Defendant was charged with selling Gregory's powder which contained 41 per cent. of carbonate of magnesia. Mr. Rohm, in the course of his evidence, said he had been in business as a chemist for twelve years, and had always used carbonate of magnesia in making Gregory's powder. All the ingredients he used in the preparation were genuine drugs. The Magistrate said defendant was bound to sell as Gregory's powder the preparation laid down by the B.P., and fined him 10s.

Railway-charges for small Consignments.

THE Railway and Canal Commission, consisting of Mr. Justice Wright (President), Sir F. Peel, and Viscount Cobham, sat on March 2 to hear further evidence in the test-case of Messrs. Smith & Forrest, manufacturing chemists, Liverpool and Manchester, against the principal railway companies. The applicants ask for a declaration that certain charges are unreasonable and illegal.

The case for the appellants, which was begun in August last, is that since the last day of November, 1892, the defendant companies have increased a large number of rates for merchandise forwarded in consignments of not more than 3 cwt. In consignments of 1 cwt. the increase is at the rate of from 1s. 8d. to 5s. per ton, or from 11 to nearly 16 per cent. On consignments of 2 cwt. the increase is from 2s. 6d. to 3s. 4d. per ton, or from 12 to 20 per cent. The appellants also complained of an increased rate on returned empties, and of the fact that cartage was charged at the rate of 12s. 6d. per ton, whether the trader required it or not. They asked for a declaration that these increased rates were illegal, and for damages. The respondents, in their reply, contended that the increased rates were absolutely necessary, because of the increased cost of working, the shorter hours of labour, and the larger number of small packages, which entailed the employment of more hands to deal with them.

The case for the respondent companies was continued, and after evidence had been called the further hearing was adjourned.

Sale of Food and Drugs Acts.

SEIDLITZ POWDERS.

AT Liverpool Police Court on February 23, Jane F. Hodson, Vauxhall Road, was summoned for having sold seidlitz powders which on analysis were found to be deficient to the extent of 5.5 grs. of bicarbonate of soda, 23 grs. of Rochelle salt, and 22 grs. of tartaric acid. Defendant said she had purchased the powders from a traveller. They were manufactured by Bell, Sons & Co., Liverpool, and there was a label upon them which stated that they were genuine. Defendant was bound over.

BEESEX.

AT Dartford on March 3, Cornelius Ryan, Bexley Heath, was fined 10s. for selling beeswax which the County Analyst certified contained 41 per cent. of resin.

CAMPHORATED OIL.

AT the Warminster Petty Sessions on March 1, John Walton & Co. (Limited), drysalters and grocers, Maiden Bradley and Mere, Wilts, were fined 1l. and costs for selling camphorated oil not of the nature and quality demanded. This was the case recently referred back to the Court by the Queen's Bench, the points of which are as follows:—Information was laid on October 21 last by Frank Beardsley, an inspector under the Act, against Messrs. Walton & Co. that a sample of camphorated oil purchased contained only 8 per cent. by weight of camphor, instead of 21 per cent. required by the British Pharmacopœia. The proceedings were taken under Section 6 of the 1875 Act. Messrs. Walton & Co. urged that as camphorated oil was a compound drug, proceedings could only be taken under Section 7 of the Act, and no offence had been, or could be, committed under Section 6. On the other side the contention was against this view. The Magistrates decided that camphorated oil was a compounded drug, that a summons could only be issued under Section 7, and they dismissed the information. Beardsley appealed. The Court allowed the appeal, with costs, and sent back the case for the Magistrates to hear with the above result.

LIME-WATER.

AT Warminster Petty Sessions on March 1, John Walton & Co. (Limited), drysalters and grocers, were fined 1l. and costs for selling lime-water which contained only 1½ gr. of lime in 10 oz., instead of 5 gr. as required by the B.P.

BORIC ACID IN CREAM.

IN the case reported in last week's issue (page 385) the amount of boric acid was 0.93 per cent. The decimal point had

gone astray in our report; another object-lesson of the necessity for placing the cipher before decimal points.

BORAX FOR ARROWROOT.

AT Halstead Petty Sessions on February 27 Thomas Gallifant, a shopkeeper of Earl's Colne, was fined 1s. and 18s. 6d. costs for selling adulterated arrowroot. Mr. Thos. A. Pooley, B.Sc., the county analyst, certified that the article sold was borax, and the defendant explained that this had been given in mistake for arrowroot.

LINSEED MEAL.

AT Borris (Ireland) Petty Sessions a shopkeeper named Eliza Kelly was fined a nominal penalty of 2s. 6d. and costs for selling ground linseed cake, from which nearly all the oil had been extracted, as linseed meal.

PATRICK HUGHES, of Ballykennan, was summoned for a similar offence. He pleaded that the meal was sold as pure linseed meal ground from linseed cake, and handed in a receipt from the wholesale merchant for 5 tons of the "best linseed-cake meal." The Magistrate said that linseed-cake meal was evidently sold throughout the country as linseed meal, but it was a wrong practice which could not be permitted. A fine of 2s. 6d. and costs was imposed.

ALUM BAKING-POWDER.

AT the Chippenham Petty Sessions on March 1, John Henry Harding, grocer, of Chippenham and Bath, was fined 3l., including costs, for selling "Alpine" baking-powder, prepared by H. Matthews, of 67 High Street, Plymouth, which contained alum as the acidulous ingredient. This was the first case of the kind since the definition of "food" under the Sale of Food and Drugs Act was extended to include baking-powders. The case was taken under Section 6 of the 1875 Act, and from the facts, which are briefly as follows, it will be seen that there was substantially no defence, and it would have been much more interesting and conclusive had the defendant endeavoured to prove to the Bench that alum in baking-powder is entirely neutralised when it comes into action:—The prosecution stated that the label on the powder said that it was most nutritious, and a great preventive of indigestion; but the analysis proved that to be diametrically untrue, and that it contained 14 per cent. of alum, which meant, in baking, a 2-lb. loaf, that there would be about 60 gr. of alum in it, whereas there should be only about 5 gr. Baking-powder should contain tartaric acid, which cost about 5l. per cwt., whilst alum cost about 5s. Mr. Harding admitted selling the powder. He said he had no idea that it was adulterated, and bought it at a fair commercial price. The Chairman said they would take it that the defendant was ignorant of the ingredients, but he should not sell an article as described unless he got a guarantee. The mitigated penalty was not to be taken as a criterion in further cases. Defendant wished it to be distinctly known that this was not a cheap article, and it was sold as bought.

High Court Cases.

A DEBENTURE-HOLDER'S ACTION.

IN the Chancery Division on March 5, Mr. Justice Farwell heard an action at the instance of Mr. Arthur Foster, a debenture-holder in the Borax Company, against that company, and against Lafayette Hoyt de Friese and Borax Consolidated (Limited). Mr. Hughes, Q.C., in opening the case, said plaintiff held 114,000l. of debentures. In November, 1898, the Borax Company proposed to sell its whole undertaking to Mr. de Friese with the object of carrying out a scheme of amalgamation of the business of the company with that of other companies and firms; and the Borax Company was to take, as consideration for the sale, debentures and shares in Borax Consolidated. The plaintiff said the company was not entitled to do this without making provision for payment of the debentures of the old company, which were a first charge on the undertaking. On a motion, Mr. Justice North granted an interim injunction restraining the defendant company from carrying out the arrangement without providing for the debentures. The defendants had appealed, and then it was found that the large majority of the debenture-holders supported the view of the company,

and wished to carry out the scheme; but it was suggested that the sum of 16,900 $\frac{1}{2}$., the amount held by opposing debenture-holders should be paid into court, and that was done, and thereupon the injunction was dissolved. The company was incorporated in 1887 to carry on the business of miners, refiners, manufacturers, and dealers in borax, with a power to amalgamate with other companies carrying on analogous businesses. In 1898 there were 295,200 $\frac{1}{2}$. in debentures of 100 $\frac{1}{2}$. each. In July, 1898, the scheme of arrangement was adopted; and for each existing debenture the holder was to have two new debentures of 50 $\frac{1}{2}$. each in Borax Consolidated, the first repayable in 1925, and bearing 4 per cent. interest, the latter having no fixed period for repayment, but bearing 6 per cent. interest payable only out of profits. The consideration for the sale was to be 320,000 $\frac{1}{2}$., and the capital of the new company was 1,400,000 $\frac{1}{2}$. The plaintiff complained that the company was parting with its whole undertaking over which the debenture-holders held a first charge, and were giving the debenture-holders a very different thing in substitution. The new arrangement was not the bargain which the original debenture-holders entered into. They did not know the value of their new security, and, although the transaction had been completed now, at the time this action was raised the transaction had not been carried through. He asked that the opposing debenture-holders should be put in exactly the same condition as if Mr. Justice North's injunction had been continued—in other words, that the Court should declare that they were entitled to have their principal and interest.

Mr. Swinfen Eady, Q.C., for the company, called the Hon. H. A. Lawrence, Chairman of the Borax Company, and a director of Borax Consolidated, who in the course of his evidence showed that before the amalgamation the competition was so keen that the price of borax had fallen from 30 $\frac{1}{2}$. to 13 $\frac{1}{2}$. per ton. By the amalgamation the security of the original debentures had not been prejudiced in any way; in fact, the value of the security had been doubled.

His Lordship adopted Mr. Justice North's decision in his construction of the memorandum. He could see no ground for saying that the debentures had accrued due, and could grant no relief for payment at once or by way of a declaration, which seemed to be no longer required. He proposed to make no order in the action except to direct that the 16,000 $\frac{1}{2}$. should remain in court. He declared that the plaintiff and other dissentient shareholders were entitled to a floating charge, and he gave the plaintiff his costs of the action against the old company.

TRADE-MARK DISPUTE.

THE case of J. C. & J. Field (Limited) v. Wigel Syndicate (Limited) came before Mr. Justice Buckley in the Chancery Division on March 2, and its hearing lasted several days. Plaintiffs alleged infringement of trade-mark and passing off soft soap under the name "Savoline," which might be mistaken for "Savonol," plaintiffs' soap. There was a cross-motion by the defendants to rectify the register by removing the word "Savonol" as a trade-mark. Defendants based their motion for the removal of "Savonol" from the Trade-mark Register on four grounds—(1) that "Savonol" was not an invented word; (2) that it was a descriptive word only; (3) that it ought not to have been registered in view of previous registrations and prior use of several other similar names; (4) that registration of "Savonol" covered goods upon which Messrs. Field had never used it.

In support of the plaintiffs' case,

Mr. Frederick Arthur Field, a member of the plaintiff firm, said different kinds of soft soap were sold under the "Savonol" trade-mark, including ordinary domestic, carbolic, and scouring soaps, either in casks or tins of various weights. The soap had been extensively advertised and exhibited at the trade-exhibitions, and its sale had steadily increased. Defendants' tins were very similar in style to those of his firm, and in his opinion the likeness was likely to cause confusion and injure his business. The inventor of the word "Savonol" was dead. His trade-mark was the French word "Savon" with "ol" added. Price's sold a soap under the name of "Savon Regina," Yardley's had a soap named "Savon Vieilleurs," and Cleaver's "Savon Royal." Many makers used the French instead of the English word, especially in toilet soaps. The get-up in different-sized tins

was common to the soap trade. He had heard of "Savonine" as a preparation for making the hair grow, or something of that kind, but it was not a word used in the soap trade.

Mr. Cutler, for defendants, said "Savonol" was not an invented word. It was formed of the French word "savon," the equivalent for soap, with "ol" added. Savon was a word in regular use for numerous soaps, especially toilet and perfumed soaps. It was not a word which could properly be registered. "Eau de Cologne" had also been declared to be an unfit word for registration. Supposing plaintiffs' trade-mark "Savonol" remained on the register, they were not entitled to an absolute injunction to restrain the defendant company from using "Savoline," but only from using it in such a way as to pass off their goods as the plaintiffs' goods.

Witnesses for the defendant company were then called, amongst them Mr. Kibble, manager of the grocery department of Harrod's Stores for thirty-three years, who said he had never heard of "Savonol" until this case. The labels of the two articles were quite distinct; but some people might be deceived by the name.

Mr. Justice Buckley said, in his judgment, though "Savon" was the French term for soap, and "Savonette" he agreed would be a descriptive term implying a diminutive soap, "Savonol" had no meaning whatever until attached to the article. The fact that people in the trade used the French or English term for soap indiscriminately made the word "Savonol" not less an invented word. Consequently the motion to rectify the Register failed. His Lordship also found no similarity in the get-up of the tins, but the defendants' own witness (Mr. Kibble) admitted that the use of the word "Savoline" might deceive purchasers intending to buy "Savonol," and there must be an injunction from using it in such a way as to pass off the defendants' goods as plaintiffs' goods, defendants to pay the costs.

County Court Cases.

NO ORDER FOR ISAAC.

AT the Bow County Court on March 5, before his Honour, Judge French, Q.C., Edwin Thomas Johnson, described as a chemist, of Gipsey Lane, Upton Park, appeared to answer a judgment-summons issued at the instance of Isaac Gordon, the money-lender (since dead), for 14 $\frac{1}{2}$. 4s. 6 $\frac{1}{2}$., money lent and interest. In answer to the Judge defendant explained that he was merely manager of the business, with a wage of 30s. a week, and he had a wife and family dependent upon him for support. His Honour remarked that there was absolutely no evidence of means whatever, and would make no order of any kind. This decision was loudly applauded in court.

A SHABBY DEFENCE.

AT Hastings the case has been heard of Jameson and another v. Barron, the claim being for 1 $\frac{1}{2}$. 14s. 6 $\frac{1}{2}$. for goods sold and money lent. It appeared that defendant's daughter was visiting Hastings, and went to plaintiffs, who are chemists, to borrow money for her and her mother to return to London. The daughter, Mr. Jameson stated, was in a state of fever, and he advanced 25s. to Mrs. Barron. Defendant declined to accept liability. The Judge said a man could not be made responsible for money borrowed by his wife, though, under the circumstances, it was rather shabby to dispute it. Judgment was given for defendant, with railway-expenses from London.

STORE DENTISTRY.

AT Brompton County Court on March 6, Mrs. Elizabeth Blackburn claimed 50 $\frac{1}{2}$. damages against the Sloane Pharmacy Stores (Limited), 19 King's Road, S.W., and Mr. Rupert Albert Fyson, a chemist's assistant, for injury said to have been caused through negligence on the part of the defendants in a dental operation. The evidence for the plaintiff was to the effect that she called at the defendants' establishment for medicine to relieve neuralgia, and in course of conversation with the manager asked whether there was a good dentist near. The manager recommended Mr. Fyson, an assistant at the Stores, who arranged to extract a decayed right lower molar. Mr. Fyson, it was alleged, applied cocaine, and then extracted, not the molar, but a porcelain crown to a bicuspid in the same part of the jaw. The porce-

lain crown only was taken away, but the screw which had fastened the crown to the stump was so bent that another crown could not be fixed. After the operation plaintiff left the defendants' establishment in great pain, and had to get some "draughts" from another chemist to relieve her. Subsequently she went to Mr. Oliver Duncan, Belgravia, who extracted the offending molar. The plaintiff, in her evidence, alleged that the manager of the Stores introduced Mr. Fyson to her as a qualified dentist.

Evidence in support of the plaintiff was given by Mr. Oliver Duncan, surgeon-dentist, Belgravia, S.W., who said he extracted the molar in question with the aid of nitrous-oxide gas. Owing to the pivot in the bicuspid being bent, it was found impossible to re-fix another crown. Witness did not think the crown could have been broken off by knocking against the forceps, although such an accident was possible. In his opinion the crown must have been broken off by pinching with the forceps.

For the defence, Mr. Fyson, chemist's assistant, and not a registered dentist, although he had studied dentistry and practised extracting teeth for about eleven years, said when the plaintiff pointed out the troublesome molar there could be no doubt whatever but that the tooth should be removed. He applied ethyl-chloride as a local anæsthetic, and not cocaine, as stated by the other side. The plaintiff was in a hysterical condition, and as soon as he applied the instrument to the molar the lady sprang forward and knocked the crown on the bicuspid against the forceps. If there had been any mistake on his part as to the tooth to be extracted he would not have taken the broad-molar forceps, but the one for a bicuspid. He denied pinching the bicuspid crown with the forceps. The manager at the Stores knew quite well that he (Mr. Fyson) was not a registered dentist.

Mr. Frederick Carter, manager to the defendant company, stated that he said nothing, to his knowledge, to lead the plaintiff to suppose that they had a qualified dentist upon the premises. He had never stated that Mr. Fyson was a qualified dentist.

Judge Stonor said there could be no doubt that the manager at the Stores recommended Mr. Fyson as a competent man to extract teeth, if not as a competent dentist. His Lordship was inclined to think that the man made a mistake, and got hold of the wrong tooth. He also thought that he did not exercise proper skill, and a verdict for the plaintiff for ten guineas and costs was given.

Bankruptcies and Failures.

Re JOHN FARMER NICHOLLS, Heckington, Schoolmaster and Ointment-manufacturer.

A RECEIVING-ORDER has been made in the Boston County Court against this debtor, who is the manufacturer of an ointment known as "Bishop's Balm."

Re CHARLES HENRY FOOTT MENHINICK, Millbay, Plymouth, Chemist.

THE receiving order was made on April 20 last, and the Official Receiver at Plymouth has given notice that he is about to declare a first and final dividend, and creditors must send him their proof on or before March 18. The liabilities were returned in the bankrupt's statement as 1,152*l.* 13*s.* 4*d.*, and the estimated amount available for distribution in dividend is stated to be 120*l.*

Re H. L. DAVIS, late of Portobello Road, Notting Hill, Patent-medicine Vendor.

ON March 6, at the London Bankruptcy Court, the public examination of this debtor was held upon accounts showing gross liabilities 14,896*l.* (unsecured 4,431*l.* and assets 4,208*l.*). In the course of his evidence the bankrupt stated that he was qualified as a medical practitioner only by a diploma obtained at Berne. In 1881 he commenced business at Portobello Road as a patent-medicine vendor, and carried on a lucrative business in "Dr. Davis's female pills," and other articles. He advertised his wares in some hundreds of papers and periodicals, with the result that they yielded him a gross income of 2,500*l.*, and a net profit ranging from £00*l.* to 1,000*l.* per annum. In that business he was assisted by Miss A. M. Brown, to whom he eventually sold the undertaking for 450*l.* At that time the value of the business

had considerably fallen away, owing to several blackmailing actions which were instituted against him. Eventually the examination was ordered to be concluded.

Re GEORGE JEANES, Park Road, Liverpool, Chemist and Druggist.

ON February 28, at the Liverpool Bankruptcy Court, the public examination of this debtor was resumed. He was now further questioned on certain points by the barrister who appeared on behalf of the creditors, after which Mr. C. B. Taylor, who appeared for the bankrupt, applied for the closing of the public examination. It was true, Mr. Taylor stated, that the question of a cash account had been mentioned as being desirable, but such an account was, in view of particular circumstances, exceedingly difficult to prepare, and he (Mr. Taylor) ventured to think that, even if filed, it would be of little service. Moreover, Ladysmith had been relieved, and the precedent set by Mr. Justice Grantham on the occasion of previous good news from the front was one, Mr. Taylor suggested, which might now be followed. Mr. Registrar Bellringer said that was a consideration that should not, and could not, be allowed to affect his mind. At the same time if the Official Receiver did not press for the cash account, he as Registrar should not insist upon it. Thereupon the Official Receiver remarked that he did not feel inclined to press the matter, and Dr. Thomas, for the creditors, having indicated that upon the whole he thought the interests of his clients would not be seriously prejudiced without the account in question, Mr. Taylor's application for the closing of the examination was granted.

Deed of Arrangement.

Mackillip, George B., 99A Rathgar Road, Dublin, pharmaceutical chemist. The following are creditors:—

	£	s.	d.
Allen & Hanburys, London	...	9	6 10
Barron, Harveys & Co., London	...	6	16 0
Bowe, B., Dublin	...	5	0 0
Case, Thomas, Rathgar	...	4	3 9
Gilbertson, —, London	...	25	0 0
Harker, Stagg & Morgan, London	...	34	0 0
<i>Irish Figaro</i> Company, Dublin	...	5	17 6
Mackillip, John, Londonderry	...	10	0 0
Mackillip, Margaret, Londonderry	...	30	0 0
Mackillip, Mrs. Jane, Londonderry	...	100	0 0
Meyers, A. C., Rathgar	...	15	0 0
Page, Miss, Dublin	...	17	10 0
Sharpe Brothers, London	...	6	13 9
Stuart, John, Coleraine	...	30	0 0
Thacker & Hoffe, Dublin	...	319	0 0
Thompson, Frederick, Dublin	...	16	0 0
Vinolia Company, London	...	8	4 3
Wilkinson, J. F., Manchester	...	21	0 0
Bankers' claims	...	400	0 0

Gazette.

Partnerships Dissolved.

Dobie, W., and Scatterty, W., under the style of Dobie & Scatterty, Heighley, physicians and surgeons.

Dow, J., and Williams, W. R., under the style of Dow & Williams, Bridgend, Glamorganshire, veterinary surgeons.

The Bankruptcy Acts, 1883 and 1890.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Robinson, James, Ulverston, Lancashire, surgeon—February 13, 1900: discharge granted.

New Companies & Company News.

ARTHUR T. BULL (LIMITED).—Capital 12,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on as "Arthur T. Bull" at Portsmouth, and to carry on the business of drapers, clothiers, furnisners, chemists, &c.

JOSEPH BURTON & SONS (LIMITED).—Capital 260,000*l.*, in 1*l.* shares. Objects: To acquire and carry on the business of grocers, chemists, drapers, &c., carried on at Nottingham as Joseph Burton & Sons. The first directors are J. Burton (chairman), F. E. Burton, P. G. Burton, and G. A. Burton. Qualification, 1,000*l.*

HALLAMS (LIMITED).—Capital 20,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on at Burton-on-Trent as "Hallams Syndicate," and to manufacture and deal in chemicals and chemical products of any description. The first directors are:—H. J. Staples, The Old Hall, Spondon, gentleman, and S. Briggs, Ashby Road, Burton-on-Trent, brewer's engineer. Registered office, Dallow Lane, Burton-on-Trent.

HOADLEY'S (LIMITED).—Capital 15,000*l.* in 1*l.* shares. Objects: To take over the business of Frederick Hoadley, draper, ironmonger, grocer, chemist, &c., of Burgess Hill and Seaford, Sussex. The first directors are F. Hoadley, A. P. Serase, H. Uridge, A. Hoadley, J. Hoadley, and E. Brown. Qualification, 100*l.* Remuneration, 60*l.* per annum, divisible. Registered office, Prospect House, Prospect Place, Burgess Hill, Sussex.

JOSELAND & CO. (LIMITED).—Capital 2,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on at Burslem by W. H. Joseland, and to carry on the business of manufacturing confectioners, drysalts, druggists, manufacturing chemists, patent-medicine vendors, &c. The first subscribers (each with one share) are:—H. G. Broomfield, Morningside, Alsager, Stoke-on-Trent, advertising contractor; J. J. Broomfield, 51 St. John Street, Hanley, Staffs, earthenware manufacturer; W. W. Broomfield, Stanfield Road, Burslem, Staffs, traveller; H. Lewis, New Street, Hanley, Staffs, advertising agent; W. H. Joseland, Station Road, Alsager, Stoke-on-Trent, analytical chemist; Mrs. Mabel A. Joseland, Station Road, Alsager, Stoke-on-Trent; and Mrs. Susanna Broomfield, Morningside, Alsager, Stoke-on-Trent. The first directors are:—H. G. Broomfield, J. J. Broomfield, W. W. Broomfield, and H. Lewis. Qualification, 25*l.* Registered office, Victoria Works, Newport Lane, Burslem, Staffs.

SOUTHALL BROTHERS & BARCLAY (LIMITED).—The market price of the 1*l.* 5-per-cent. preference shares of the company is from 24*s.* 6*d.* to 25*s.*

BRANDRAM BROTHERS & CO. (LIMITED).—The report of the directors of this company of sulphur merchants for 1899 states that the balance of profit, including 259*l.* carried over, is 8,757*l.* A dividend of 4 per cent. on the ordinary shares is to be paid.

SALT UNION (LIMITED).—The report for 1899 states that after meeting maintenance and other charges the profits amount to 58,601*l.* The interest paid on debentures absorbed 54,000*l.*, leaving 4,601*l.*, which has been written off the cost of the acquisition of the distribution business, &c. The preference and ordinary shares get no dividend.

THE EPPING NATURAL MINERAL-WATER COMPANY.—In the Chancery Division on March 2, Mr. Justice Stirling granted an application by the debenture-holders of this company for the appointment of a receiver and manager. It appeared that the interest on the debentures had been in arrear for more than two years, and the company had offered the business for sale.

TRITICINE (LIMITED).—The Official Receiver at Wakefield has issued a long statement in this case, the proceedings in which have been reported from time to time since the winding-up order was made a year ago. The most important part of the statement refers to the accounts submitted in February, 1899, by Mr. Goodall, the managing director. These, the Receiver points out, show a deficiency of 72,948*l.* instead of 80,717*l.*, and the difference, 7,769*l.*, is as yet unaccounted for, Mr. Goodall having failed to supply the particulars.

KODAK (LIMITED).—The report of the directors for 1899, to be presented at the meeting to be held on March 14, states that the business was taken over on November 21, 1898, with the benefit of dividends on the shares of the Eastman Kodak Company. The company has also had the benefit of the European profits as from January 1, 1898, subject to the payment of certain dividends to the shareholders of the Eastman Photographic-materials Company (Limited). After payment of these dividends, there remained from both sources a profit to the company of 41,215*l.*, which has been credited to capital account and applied in reduction of the purchase-price. The combined accounts show that the amount standing to the credit of profit and loss, after deducting an amount written off for goodwill, is 345,778*l.*; while the separate profit and loss account of Kodak (Limited) exhibits a credit balance of 213,521*l.* The directors now recommend a bonus of 5 per cent. on the ordinary shares, making for the year a total

distribution of 15 per cent. The following is the proposed application of the profits:—Dividend of 6 per cent. on the preference shares, 39,111*l.*; dividend and bonus, equal to 15 per cent. on the ordinary shares, 150,000*l.*; surplus profits carried forward in Europe, 24,409*l.* The surplus profits carried forward in America are 127,437*l.*

DAVID THOM, DOMEIER & CO. (LIMITED).—The directors, in their second annual report, intimate a continued increase in the cost of raw materials, and a diminished profit. The increase of the cost of raw materials has been minimised by the increased soap-trade the company has done, by an improvement in the London business, and by a rise in price in some classes of soaps; there has been no advance in the prices of the firm's soap "specialities." The report would have been not unsatisfactory but for the unprofitable result from the glycerin manufactory owing to the change of system initiated before the elected directors took office. In view of the reluctance of the whole of the directors to risk more of the shareholders' money in an apparently unprofitable portion of the business one of the directors provided a sum of 1,250*l.* for perfecting a portion of the plant. The perfected plant only commenced working towards the end of December last; since then the results, carefully taken out, have proved more satisfactory. After making allowance for depreciation, bad and doubtful debts, working expenses, salaries, and advertising, there remains a net profit for the past year of 7,520*l.* 14*s.* 9*d.*; adding to this the amount carried forward from last year, 324*l.* 6*s.*, the total amount is 7,845*l.* 0*s.* 9*d.* Deducting from this the dividend on the preference shares to December 31, 1899, amounting to 4,640*l.*, the balance left available is 3,205*l.* 0*s.* 9*d.* After providing 960*l.* for directors' fees, auditors' charges (the managing director not taking his commission on net profits), income-tax, &c., there remains a sum of 2,245*l.* The directors think that the best interests of the company, and of its shareholders, will be served by recommending the transfer of 1,000*l.* to the reserve fund (making that fund 2,000*l.*), and to carry forward the balance of 1,245*l.*

PRICE'S PATENT CANDLE COMPANY (LIMITED).—The report of the directors of this company for 1899 states that, owing mainly to exceptional circumstances, the profit amounted to 99,485*l.*, exceeding by 15,500*l.* the largest profit ever made by the company in a single year. Adding 6,136*l.* brought forward (together 105,621*l.*), and deducting the dividend of 18*s.* a share, amounting to 33,750*l.*, paid in September last, there remains a disposable sum of 71,871*l.* The directors recommend that 12,500*l.* be written off for depreciation; that 37,500*l.* be applied in paying a dividend of 1*l.* per share; that 15,000*l.* be added to the reserve fund, which will thus be raised to 65,000*l.*; and that the remaining 6,871*l.* be carried forward. The recommendation to increase largely the reserve fund rather than raise the dividend above 1*l.* per share is based upon the facts that the profit was abnormally large, and that new conditions have recently arisen calculated to reduce the profit of future years. In 1899 the prices of raw materials were comparatively low, and the company was thus enabled to do a very large business at a fair tonnage rate of profit in the earlier months of the year, and at a much larger profit towards its close, when it became known that the demand for paraffin, the material chiefly used in the manufacture of candles in this country, had largely exceeded the supply, and that its price would be much advanced when current contracts expired. Not only has the price for the contract-season commencing on April 1, 1900, been raised by over 80 per cent., but the quantity desired by candle-makers is unobtainable even at the advanced price. The prices of coal, timber, and stores generally have also been considerably raised, and thus the cost of production in all departments of the company's business has been materially increased. A resolution to lighten the labours and suitably recognise the services of Mr. Withall, who completes this month his fiftieth year of service with the company, during forty-six of which he has been secretary, will be submitted to the meeting.

A PRUSSIAN APOTHEKER has drafted a petition to be presented to Parliament for permission to a country apotheker working without an assistant or an apprentice to close his business on Sundays after 2 P.M.

Marriages.

ARMSTRONG—GRAHAM.—At Pollokshields, on February 28, by the Rev. Robert McMillan, assisted by the Rev. David M. Connor, M.A., LL.B., Tom F. Armstrong, chemist, Dundee, to Jemima, daughter of the late Mr. G. Graham, merchant, Annan.

PURDIE—MCLENNAN.—At the Imperial Hotel, Inverness, on March 1, by the Rev. Mr. McKenzie, William Alexander Purdie, chemist and druggist, to Johanna, only daughter of Mr. D. McLennan, Strathpeffer.

Deaths.

ALLEN.—On February 19, Mr. William Hart Allen, Catford, chemist and druggist. Aged 87.

BLYTON.—On March 7, at 5 Bennett Road, Higher Crumpsall, Manchester, Jane Roberts, wife of Mr. John Blyton, chemist and druggist. Aged 62.

BOND.—On February 18, Mr. Henry Bond, Liverpool, chemist and druggist. Aged 74.

BROOKE.—At 344 Mare Street, Hackney, N.E., on February 28, Mr. Frederick Brooke, chemist and druggist, and druggists' sundriesman. Aged 61. The late Mr. Brooke was born in Stockport, and came of a long line of medical men. He was for several years in business at 339 New North Road, Islington, N., but retired about eight years ago.

BULLING.—At Montreal, last month, Mr. William B. Bulling, pharmacist. Aged 74. Mr. Bulling was born in Norfolk, England, and after about fifteen years' residence in the United States, proceeded to Montreal, where he opened a first-class pharmacy, fitted-up after the English fashion, which he carried on until his death.

FLEWITT.—At Wylde Green, near Birmingham, on March 3, Mr. Charles T. M. Flewitt, chemist and druggist. Born in Birmingham, Mr. Flewitt was educated at Solihull, and subsequently became an apprentice at the Birmingham Dispensary in New Street. He commenced business as a chemist on his own account in Snow Hill, but after a few months he removed to High Street, and there he carried on business uninterruptedly for half a century. His shop became one of the landmarks of old Birmingham. He built up a large connection, and earned for himself the respect alike of his brethren and of the public. He retired from business sixteen years ago, and leaves three sons and three daughters, one of his sons being Dr. Flewitt, who is in practice in Birmingham.

GOLDON.—At Parsonstown, on February 28, Mr. John William Goldon, L.A.H., eldest son of the late Dr. Goldon, the Medical Hall, Birr, and brother of Mr. Goldon, M.P.S.I.

HANBURY.—On March 5, Mr. Sampson Hanbury, J.P., of Wyvenhoe Park, Colchester, formerly of Langford Park, Malden. Aged 73. The deceased gentleman was a son of Mr. Daniel Bell Hanbury, who was for so long a member of the firm of Messrs. Allen & Hanburys, of Plough Court, E.C., and for many years treasurer of the Pharmaceutical Society. His elder brother was Daniel Hanbury, F.R.S., well known to every student of pharmacognosy, and another brother is Mr. Thomas Hanbury, who now resides in Northern Italy. Mr. Sampson Hanbury was a director of the first electric railway—the City and South London. He lived the life of a country gentleman, and was seldom seen in town.

HUGHES.—On February 19, at Talybont, Cardiganshire, Mr. Thomas Hughes, chemist and druggist. Aged 63.

INMAN.—At Jesmond, Newcastle, on March 1, Mr. James Henry Inman, of J. H. Inman & Co. (Limited), chemists, Newcastle. Aged 43. The late Mr. Inman had been in business in Newcastle for the past twenty years, and his firm had branches in Newcastle and several adjacent towns. He was a well-known Freemason, and recently passed through the chair of the Prince of Wales Lodge.

MCCULLAGH.—At Gorgie Mills, Edinburgh, on February 25, Mr. Andrew McCullagh, for forty-two years manager with J. & G. Cox, glue and gelatin manufacturers. Aged 83.

MASON.—On February 16, Mr. Arthur Newton Mason, chemist and druggist, Handsworth, Birmingham. Aged 55.

NEWTON.—On February 23, Mr. Joel William Newton, chemist and druggist, Salisbury. Aged 64.

SALZER.—At Worms, on January 29, Theodor Salzer. Aged 67. The deceased, who was widely known as the discoverer of phosphorus acid, published several pharmaceutical treatises, which chiefly appeared in the *Pharmaceutische Zeitung*. Until 1892 he was an active member of the Pharmacopoeia Committee of the German Apotheker Society.

SCHIFFNER.—On February 16, at Meran, Rudolph Schiffner, apotheker, Knight of the Franz Joseph Order. Aged 82. The deceased, who was born in Vienna, was for twenty-one years managing director of the General Austrian Apotheker Society, and belonged to this Society since its foundation. He was appointed a member of the Directorate Committee in 1862, and was always one of the leading speakers. He was the founder of the Pharmaceutical School and the Chemical Laboratory, and the co-founder of the Institution for the Analytical Examination of Foods and of the Society's collections and herbarium. The drug-collection with chemical laboratory and pharmaceutical school were Schiffner's favourite institutions, on which he expended not only great trouble and time but considerable sums of money. He introduced the manufacture of soda-water into Austria, having established a soda-water factory in Vienna. He was elected corresponding member of the Société de Pharmacie in Paris in 1866, and was an honorary member of the St. Petersburg Pharmaceutical Society.

TOOGOOD.—On February 21, Mr. James Toogood, for a number of years one of the partners in the firm of Messrs. Wm. Toogood, of Heddon Street, Regent Street, W.

College Notes.

MR. E. CRAWFORD and Mr. Stanley Proctor, both former students of the Manchester College of Pharmacy, are now on active service as dispensers with the troops in South Africa.

FROM the Imperial College of Chemistry Mr. E. Jenkins proceeded to South Africa as dispenser on March 3, and Mr. P. J. Michelmores follows in a like capacity on March 10.

LONDON COLLEGE OF PHARMACY.—The second smoking concert in connection with the football club was held on March 1 at the Gauden Hotel, Clapham Road; a large number of past and present students attended and spent a very enjoyable evening. Falling as it did on "Ladysmith Day," the toast of "The Queen," proposed by Mr. Wootton, the principal, who was in the chair, was naturally received with great enthusiasm. The musical programme was excellent, the feature of the evening being the violin solos by Messrs. Douglas and Kieft.

MR. G. S. V. WILLS, Principal of the Westminster College of Pharmacy, recently received from his pupils a beautifully-finished kit-bag and silver matchbox. In presenting the gifts Mr. Kemp spoke of the personal interest which Mr. Wills takes in his students. All this happened on St. Valentine's Day. A week later Mr. Wills took his students down to Kew, where they botanised in the afternoon, and at 5.30 adjourned to the "Rose and Crown" for tea and a musical evening. Again felicitations to the Principal were many and hearty.

NORTH OF ENGLAND SCHOOL OF CHEMISTRY AND PHARMACY.—The students of this school, accompanied by the Principal, Mr. F. R. Dudderidge, F.C.S., paid a visit on March 1 to the works of Palmer's Shipbuilding and Iron Company, Jarrow-on-Tyne, where all the departments were inspected, including the engine-house and gas-works for the supply of the gaseous fuel, and the Siemens-Martin furnaces, where attention was riveted by the tapping of a charge of 35 tons of white-hot steel into the huge ladle, and its subsequent drawing-off into ingot-moulds. The processes for analysis of metal and ores were also seen and described in the laboratory, this terminating a most instructive afternoon.

The Paris Exhibition.



ANY of the English firms who are to exhibit at the International Exhibition this year have their goods ready for despatch, and many more are busy putting the finishing touch to the exhibition show-cases and stands which they intend showing.

During the week we have been making inquiries of the various firms who are going to show, and in some cases have been favoured with an advance view of the goods or stands. We

hear complaints from some of the exhibitors that the British pavilion is far from finished, but on every hand it is hoped that the structure will be ready in time for the opening.

We hear from our Paris correspondent that the Exhibition buildings are getting along pretty well, especially those in the Trocadero section. The initial letter depicts a scene in the grounds. The other illustration is a sketch of the tower of the British Colonial pavilion on the Trocadero side.

The following are some of the particulars we have collected:—

Aërotors (Limited) will show all kinds of aërotor flasks and spark-lets. There are to be shown for the first time some new size flasks.

John Bond's Crystal Palace and Nota Bene Marking-inks are to be there.

Bovril (Limited) are getting ready an extensive show of their specialities.

Brand & Co. (Limited), Brefsits (Limited), and Burroughs, Wellcome & Co. have not got their exhibits ready yet, but are planning them on a large scale.

Crossley Brothers (Limited) will show five types of their gas-engines.

J. Grossmith, Son & Co. and

John Gosnell & Co. (Limited) have not their cases ready, but they are to consist largely of perfumes and toilet-requisites.

Howards & Sons and

Hopkins & Williams are to have exhibits side by side. The former will include specimens of every alkaloid found in cinchona, and the latter firm will show fine and rare chemicals. The cases which are being despatched are plentifully garnished with labels, the regulations requiring five labels at least on each case. The Union Jack is pictured on one of the labels.

Idris & Co. (Limited) will show samples of their mineral waters, as well as lime-juice and fruit cordials.

Jeyes' Sanitary Compounds Company's exhibit is to include Jeyes' fluid, powder, sheep-dip, and medicated and toilet soaps.

Sir J. B. Lawes's exhibit will be of samples of soils and crops of great interest to scientific agriculturists.

Mellin's Food (Limited) will show their foods, emulsion, and biscuits.

A. & F. Pears (Limited) will have a big display of the well-known Pears' soap.

Price's Patent Candle Company (Limited) will exhibit all the products which they make from fats—viz., glycerin and its malt combinations, on one side of a handsome case, candles of all kinds on another, soaps on a third, and night-lights on the fourth.

The Protene Company (Limited) will exhibit proteid specialities.

Alexander Riddle & Co. (Limited), the makers of Stowers lime-juice cordial, are one of several firms who have combined to have stands of similar design. The idea is to give a better effect to the exhibits.

Ross (Limited) have had their preparations delayed somewhat by the unprecedented demand for optical instruments for the war in South Africa.

T. & H. Smith & Co.'s preparations for the Exhibition were mentioned in the *C. & D.*, February 24, page 348.

Jno. Symons & Co. (Limited) are to show Imperial cider Apple-blossom cider, Devonshire chablis, Devonshire heck and Imperial perry.

The United Alkali Company have nearly ready an alkali-manufacturer's show-case.

The Sterilite Filter Company have withdrawn from the Exhibition.

East Indian News.

MR. WALTER DONALD SMITH (of W. E. Smith & Co., chemists, Madras) has been gazetted second lieutenant of the 7th Regiment Madras Infantry.

GREAT FIRE AT AGRA.—The Agra Spinning and Weaving Mills, the agents of which are Messrs. A. John & Co., were destroyed by fire on January 10. The loss is estimated at four lakhs of rupees (37,500/.), but is covered by insurance.

OBITUARY.—Mr. T. C. Anderson, a well-known cinchona-planter, died on February 10 on his estate at Glen Morgan, Nilgiris, South India. The late Mr. Anderson was one of the oldest and most respected of planters, and had also several cinchona-estates in Ceylon.

INDIAN INDUSTRIAL EXHIBITION.—The seventh Indian Industrial exhibition has recently been opened in Calcutta, with the object of encouraging local manufactures. The exhibitors number more than six hundred (mostly natives), and the list of the various exhibits shows that the affair is likely to be a success.

THE INDIGO-INDUSTRY.—The injurious effect on the indigo-industry in India of the competition of artificial indigo with the natural dye having been represented to the British Government, steps are being taken to ascertain to what extent synthetic indigo is used by the mills in India for clothing supplied for Government purposes.

THE GROUND-NUT CROP.—No crop in the Western Presidency of India has altogether escaped the withering touch of the drought, and the ground-nut crop has been as badly smitten as any. The estimated outturn comes to only 6,800 tons for the British districts and 1,900 tons for the Native States. This is not more than one-eighth of last year's crops.

A REVOLVER-ACCIDENT.—At Calcutta recently, a Mr. Gibbs, chemist, employed at Bathgate's dispensary, and living at 24 Chowringhee, met with a somewhat severe revolver-accident. He awoke in the middle of the night hearing a strange noise, and believing that thieves were in the house, he armed himself with a loaded revolver. On going out he found that it was only rats, and returning to his room, commenced to extract the bullets from the revolver, which was half-cocked. It suddenly went off, the bullet penetrating the palm of his left hand.

THE BACTERIOLOGICAL INSTITUTE at Colombo, about which so much has been published in Ceylon newspapers, was opened on January 31 by the Governor of Ceylon, Sir West Ridgeway, K.C.B. The building is two-storied, and is thoroughly equipped with the latest and most-approved scientific appliances. Among the objects on view at the opening were glass slides containing specimens showing Widal's blood-test for typhoid fever, and another containing the typhoid bacillus. There were also specimen slides containing the *Tilaria sanguinea hominis*, or the elephantiasis worm; the dochmids—i.e., the worm causing the so-called anemia of Ceylon; samples of the bacillus coil (causing dysentery) the pus found in liver-abscess; and other objects of special interest. The institute is the gift of Mr. J. W. C. De Soysa, a local philanthropist, and Dr. H. Marcus Fernando is the director.

Boer Physic.

THE average Boer is a good customer to the chemist either on his own account or on behalf of his wife. They like physic because they need it sorely—lack of exercise, heavy feeding of not too well cooked food, and much of it of a doughy character, is provocative of internal torpidity. The men who, as an army, have exhibited a mobility which has surprised the world, are individually slow. Their wives, who are blest with many children, rarely cross their door-steps unless to go to church, so that galenic artifice has to make up for the deficiencies brought about by disregard of natural stimuli. A correspondent in South Africa who knows the Boer well and his likings in the physic line, writes to us as follows:—

When one calls on a Boer, especially if one wants anything, it is well to address him as Uncle, his wife as Aunt, and his children as cousins. If one can manage this in the "taal" so much the better. Should one address him in any other way the probability is that he will proceed with his pipe of Boer tobacco, and if he happens to be cheerful he will say, "Ik kan 'ne Engelsch verstaan." To gain say that the Boer is hospitable, especially to strangers within his gates, would be doing him an injustice. As a rule, one can get what one pays for—no more, no less. And the Boer of South Africa will consider his duty discharged in this direction when he takes the money for food supplied.

In medicine, as in everything else, the Boer makes no progress. "What was good enough for my father and his father is good enough for me," he says; but he does not get the same kind that his father's father got, anyway, only he does not know it. And what the eye does not see the heart does not grieve at. All the packers of Dutch medicines advertise that their products are manufactured according to the "original formulas" procured direct from "Holland," and caution the public to be careful of what they buy in this way. It would be extremely difficult to locate the biggest sinners in the matter of "genuine guaranteed" advocates.

The general appearance of these medicines, to meet Boer views, is exceedingly shabby. The bottles, made of the worst glass possible, reach Africa from Germany. If Dutch medicines were made strictly according to the formulas used in Holland originally, they certainly are not so now. The Boer of to-day takes larger quantities of physic than his forefathers, and the makers have had to reckon with this and keen competition to boot; so it would be hardly fitting for the manufacturer to work on the old lines.

The Boer has little or no faith in patent medicines, however much they are advertised in his newspaper. When sickness appears in the family, a good purging-medicine is administered. Should this fail to have the desired effect the Huis Apotek, consisting of the most used Dutch medicines, is gone through one after the other in quick time. The writer remembers on one occasion being on a farm in the eastern part of the colony, where a little girl of 7 was taken ill. The contents—at least, what remained—of the Huis Apotek was gone through during the day, some fifteen different articles in all, including plasters. Failing to relieve the child of pain with that lot a goat was killed, and the child wrapped up in the freshly flayed skin. That, doubtless, did her more good.

The "Huis Apotek" referred to is the family medicine-chest, which is not unlike the jappanned metal bonnet-boxes beloved of the Lancashire lass who goes to the seaside once a year. There used to be quite a big trade done in these years ago, and doubtless is yet, but South African trade is in the hands of comparatively few nowadays, and one hears little of the changes, if any, that happen in the physic line. Our correspondent sends us a few samples of Huis Apotek staples. These include four samples peculiar to South Africa, three of which are Boer medicines, viz. :—

MYRICA CORDIFOLIA (LIN.) (*Cape waxberry myrtle*).—There are seven species at the Cape, all wax-bearing, three particularly so, *serrata*, *cordifolia*, and *quercifolia*. From these berries and mutton fat, equal parts, the Dutch and coloured population make candles. A muid (about three bushels in English measure) yield from 15 to 20 lb. of wax. The method of collecting, which takes place from May to November, consists of spreading a piece of canvas under the shrub, then striking the branches with a stick, when the berries will fall easily. The shrub is plentiful in all parts of the colony where sandy tracts exist; it thrives where other growth would die for the want of water. Before the berries are bleached by the sun they have a greenish hue. Berry

wax is much harder, more brittle, and more easily powdered than bees' wax. Years ago it was used at the Cape for polishing floors, a small quantity of suet being added to make it more pliable.

HYRAX CAPENSIS (*Hyraceum*).—The Dutch name for this is dasjepis, it being the secretion of the klipdas, or rock rabbit. Therapeutically it is said to be identical with castoreum, but as that article is now generally considered useless medicinally, dasjepis has now likewise fallen in the estimation of those who dosed themselves and others with it.

KLIPSWEAT (miscalled by some klipsweet).—*Gutta Petra*, the sweat of the rock. It is collected from the crevices of the rocks, and thought to be the dung of bats. As it is only found in damp places and in the haunts of gnats and similar insects, in all probability it is the crystallisation of insect matter. Medicinally it is used by females as an antifebrile and diuretic.

DAGGA.—A species of Indian hemp, very plentiful in South Africa, and can generally be purchased at about 6*l.* per lb. No use is made of it at the Cape for manufacturing purposes. The Kafirs, especially at mining locations, buy it for smoking. They inhale the smoke through water, and a small quantity has the desired effect of stupefying.

The most famous of the packed specialties which South African chemists find their Boer customers require is Dutch drops, the well-known Harlem oils, which find favour with many all the world over. Those who are curious to know the composition of the article will find from "Pharmaceutical Formulas," page 510, that it is still made in the city of Harlem, but the sample that we have received from our South African correspondent differs in



DUTCH DROPS. PIL. CONT. OBSTRUCT. PIL. POLY. CURRENT. CROWN ESSENCE.

(Sketches half size of the originals.)

composition from any that we have previously seen, linseed oil with a trace of tar, and a little sulphur, being the principal ingredients. It is wrapped in the customary old-fashioned handbills printed in Dutch, and a Dutch authority assures us from the style of the printing and the errors in the language that it must have been printed in White-chapel, or some equally anti-Boer place. This is the heading of the handbill:—

TILLY

Kracht en Werking van het

MEDICAMENTUM GRATIA PROBATUM.

In Jesus Christus zyn verborgen alle schatten der Gezond-making, zoo des Geestes als des Vleesches; alle Kragten der Medicynen, en alle wyze Behandelingen der voor ziglige medicyn-meesters is dit Hem, doer Hem, en tot Hem: Hem zy de Eer en Heerlykheid in der Eeuwigheid. Amen.

"Wonder Essence," or Crown Essence, as it is sometimes called, is another favourite specialty. This is put up in the style shown in the engraving, and is, according to the books, a good galenic preparation compounded from aromatic herbs with aloes, myrrh, camphor, liquorice, and gentian (see "Pharmaceutical Formulas," page 487). The sample which we have received seems to have a somewhat simpler composition—camphor, aloes, coriander, and myrrh appearing to figure in it. This is also wrapped in a reprint of the original wrapper which Peter Anton Franek, the originator of it, employed, and the heading of which

indicates how oppressive must have been the sovereignty of the Austrian Emperors in those days:—

Allegria! Kapslik Poeder
crabber

MENADESCHE W ALTANED WINDEN-KB N-E-S-ND

Wy Franz de Tweede van Goois genade gekopen Remede Koezer, ten allen voden Opperhoofd van't Reik, Konig in Germanien, Hongarien, Bohemen, Dalmatien, Croatien, Slavonien, Gallicien, Ludemerien en Jerusalem Aartsbierog van Oostenrijk, Hertog van Burgund en Lothringen, Grootbierog van Toscana, Grootvorst van Transylvanien, Hertog van Milaan, Mantua, Parma, geforste Graaf tot Habsburg, Vlandern, Tyrol, &c., &c.

Two kinds of pills are illustrated in the engraving. Both are put up in small wide-mouthed bottles capped with red paper, over which a label is tied without any cork. One of these is pill polychrest, the composition being aloe and myrrh of each 3 parts; rhubarb, 2 parts; aromatic powder, 1 part; and extract of wormwood, to make a mass, which is to be divided into 2-gr. pills and silvered. Two or five of



HELMONT'S HERBS.

ROODE POEDER.

(Sketches half size of original goods.)

these pills are taken in the middle of the day. The other pill is pill. cont. obstruct. a household pill containing colocynth, scammony, aloe, rhubarb, senna, bismuth nitrate, and ipecacuanha. It is quite black externally. Presumably Mrs. Beer finds in the external appearance of these two kinds of pills the distinctions upon which she must go, seeing that the labels have to be sacrificed. Another article represented is Roode Poeder, a diuretic medicine consisting of potassium nitrate coloured pink with an insoluble bright red pigment. Finally, there is a packet of Helmont's herbs, which is to be macerated in half-a-bottle of wine or brandy for three days, and, after straining, is to be set aside for use as a medicine. We have not determined the composition.

Another phase of medicine-supplies is peculiar, we are told, the Transvaal, where

TRAVELLING CHEMISTS

are a peculiarity. We had a conversation about them with a Transvaaler the other day, and this is the gist of the talk:— Amongst the many strange characters attracted to the Transvaal by the success of the Witwatersrand Reef, none are more worthy of notice than the "travelling chemists." These men were uncertificated knights of the pestle who originally came to the Republic with the intention of settling down in the larger towns and prosecuting their business in these centres, but the competition of the legitimate practitioners was too heavy for them, and as business did not come to them they went forth to seek it. The travelling chemists were of all nationalities and two classes. They consisted of those who were fairly well-to-do, and who travelled round in "spiders," and those who journeyed on foot attended by a native wheeling a small hand-cart, or even in some cases pushing the carts themselves. Their stock-in-trade consisted of a supply of medicines got up in the most gaudy style, and a few prints representing the human frame in every stage of disease. This latter was the most valuable asset the chemist possessed. On his arrival in any small farming centre the "chemist" would engage a room in a store or on some convenient farm, and would set out his stock. He would engage a native to travel round to the neighbouring farms and inform the

people that the "chemist" had arrived, and would be ready for business in the morning. The neighbours would flock in, many coming more from curiosity than from necessity. It was here that the "chemist" got in their due work. These works of art would be hanging on the wall in such a position that they were bound to attract the attention of anyone entering the room. The effect produced on the minds of some of the Boers by these pictures can scarcely be described. The "chemist" would be appealed to as to what made a man's inside look like that. That is passed, he would gravely say, "by the blood being pure; you can always tell a person whose blood is pure by their face being so white. You've got a very white face yourself." The unfortunate might would instantly purchase a supply of some medicine "to put more blood in him." Some travelling chemists had a slight inkling of the rudiments of physics, and carried drugs in their original state with them.

The Boers, when they go into the towns, invariably pay a visit to the doctor. There is always some member of the family in poor health. The amount of sickness, owing, no doubt, to the neglect of sanitary precautions, in the up-country districts of the Transvaal is enormous. When the "travelling chemist" arrived on the scene the people would bring in their prescriptions, and the chemist would in some cases compound them. In most cases, however, he would not attempt to do so, but would try and induce the patient to take some substitute. A good percentage of these "chemists" were Hollanders and Germans, and they possessed an advantage over their American and English rivals in being able to speak the language fairly fluently. The Boer prefers dealing with the man to whom he can explain his wants easily. At one time a member of the Raad called attention to the danger to the country people of allowing these self-styled "chemists" to travel round practising a profession they knew nothing of, and suggested a measure being drafted to prohibit their practising in future; but the motion fell through, and the travelling chemist was, up till recently, much in evidence in the more remote parts of the Republic.

A Bacteriological Lyric.

Inviting the sick to dine,
When bacterium perils
Inviting plagues upon mankind
Breeding daily new spawls,
Or agar-bacilli.
These pellets hold Death Nature with a pleasant smile
Tis a pity, yet 'tis true.
And, perhaps, some day they'll say
This regarding Nature's handies with a misnomer, they
They write pages upon pages,
Do these sanitary sages;
A day's weighty tomes and volumes, their latest goods to state,
Seldom praising, always banning,
Ever probing, ever scanning,
They had new fermentations as a heartless kind of bait,
In a manner most sedate
How they prattle! How they prate!
Calming waiting epidemics as a heartless kind of bait.
Then they'll start a calculation
On the risks of osculation,
In a manner quite didactic—mind, I do acknowledge this—
For kissing is contagious;
To deny it would be outrageous;
Kindly note the strange infection when one meets a pretty miss.
All that rapture, all that bliss,
Merely may amount to this:
Tis the subtle microbe Cupid who is lurking in the kiss.

HARRY FURNACE. 34 59.

POWDERED EXTRACT OF LIQUORICE is an exceedingly useful general pill-exciptent, says Mr. A. I. Cohn, of New York. It possesses very great binding power, and very little of it suffices to yield a firm and rather hard pill. The extract has the advantage in that it may be added directly to the powders to be massed, and the pills made by simply adding a few drops of water.—*Med. & Hyg.*

Our Town Traveller.

MY visits during the past fortnight have been productive of copy of an exceptionally interesting nature, and I believe I am justified in giving premier place to

BOVRIL'S NEW PREMISES.

For more than a year an army of workmen has been engaged in erecting and decorating a huge pile of buildings in Old Street, E.C., destined for the use of Bovril (Limited) as offices and factory. The factory portion of the premises



MR. J. LAWSON JOHNSTON, F.R.I.,
Inventor of Bovril.

was ready for occupation last year, but it is only this month that the office portion was completed. The building is the most conspicuous in Old Street, and is constructed of red brick with stone facings, and is from five to seven storeys high. The block covers an area of 150,000 square feet, and has three of its sides bounded by streets. In Old Street there is a frontage of 120 feet, in Bunhill Row 200 feet, and in Banner Street 80 feet. The offices are entered by a lofty and wide doorway with pillars on each side, the steps being of white marble. To the left and right of the entrance-hall are the offices for share-transferring and the like transactions. The offices of Virol, "the Bovril baby," will also be on the ground floor, but they are not yet completed; in fact, the bottom portion of the hall was still in possession of workmen at the time of my visit. Facing the entrance is a delightful white marble staircase, the balustrades being ornamented with hammered-iron devices. At the first landing the staircase divides to the left and to the right, but either portion lands one at the entrance to the general offices. The style of this staircase, with its glistening white marble and walls painted in a very pale green enamel, reminded me of similar staircases in Elizabethan mansions, except that modern usage had placed here and there most exquisite gilded electric-light fittings. Swinging-doors admitted me to the general offices, which are panelled in polished walnut for a distance of about 10 feet from the floor, the top of the panelling being finely moulded cornices with the Bovril monogram carved on the pilasters. The style of the panelling is Renaissance. In keeping with the period, there is on each side of the door an oval window with leaded glass. I noticed also that an ox's head occurs occasionally in the decoration, in compliment to the origin of this mammoth business. As one enters there is a counter where a commissionaire attends to ascertain the wants of the visitor; here also copies of Bovril war-cables are displayed. The clerical staff is ensconced at walnut desks which appear to be fitted with every convenience which modern office luxury can suggest.

I was ushered into one of the suites of rooms reserved for the management and was received by Mr. Walker, the experienced lieutenant to Mr. Lawson Johnston, the inventor of Bovril. "We are always pleased to see

members of the Press," he said, "and especially THE CHEMIST AND DRUGGIST." I thanked him, and told him that I had come to see the new premises. Mr. Walker reminded me that I was rather early, as the premises were not quite out of the decorators' hands. "But then," I retorted, "THE CHEMIST AND DRUGGIST has always had the reputation of being first." The courteous manager then showed me over the offices. There are several cosy rooms with roll-top walnut desks and Turkey carpets for the use of the managers; there is the inevitable typewriters' room, the irritating clicking of the machines being shut off from the outer office by a double set of doors; and there is the letter-room, where method and order reigns. Along the side of the letter-room a cabinet with hundreds of little drawers is ranged for alphabetically indexing and classifying all letters received, so that any single letter can be referred to at a minute's notice. The board-room for the directors' meetings is a dream of modern refinement, and it appeared to me that the resources of art had been taxed to the utmost to provide for the comfort of the distinguished men who act in a directorial capacity for Bovril. The high-backed carved chairs are upholstered in green leather, and the soft rays of incandescent electric light are reflected from fantastic lamps on to the large oval table. The floor, it is almost needless to add, is covered with a rich Turkey carpet, the dark hues of which are in striking contrast to the light enamel of the pillars and upper portion of the walls. The fireplace is of beautiful black-and-white veined marble with ornamentation over it in relief. The room reminded me of some of the beautiful halls of the livery companies of the City. There are many other rooms which I should have felt more competent to describe had I been an expert in decoration, so I leave them for

THE FACTORY PORTION,

which is broken up into sections by 120 pairs of iron doors; the walls are covered with white enamel tiles, and the floors are of a readily-cleansable material. Beginning at the top of the factory, I was shown the manufacture of Bovril. The various extracts which, blended together, make Bovril were being incorporated in large iron digestors, whence they were transferred with meat-juice to evaporating-pans heated by steam from the engine boilers. In one there was a batch of Bovril approaching completion. The agitators were working slowly in the treacle mass, and from the pan in due time the Bovril passes to filters, where it enters a system of pipes which convey it to the room beneath for bottling. On an upper floor there is also a milling-room, where meat-



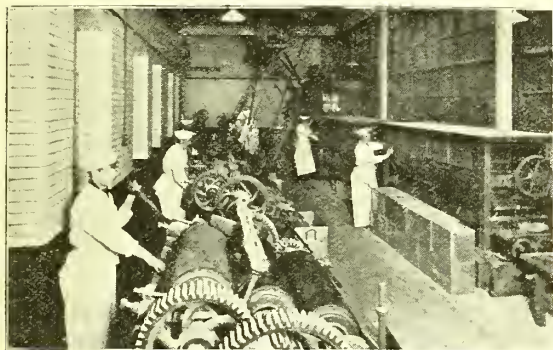
EXTERIOR OF BOVRIL'S NEW PREMISES.

The large doorway is in Old Street, E.C., and is the entrance to the General Offices.

fibrin, the ingredient which gives Bovril the distinction of containing all the nutriment of meat, was being milled. This fibrin is made from meat dried with all the juice in it,

and when it has passed through the different mills and sieves it comes out as a fine velvety light-drab coloured powder, in which condition it is added in definite proportions to the other ingredients of bovril.

The laboratories occupied by the chemists are an important part of the factory. Here each batch of bovril is tested in

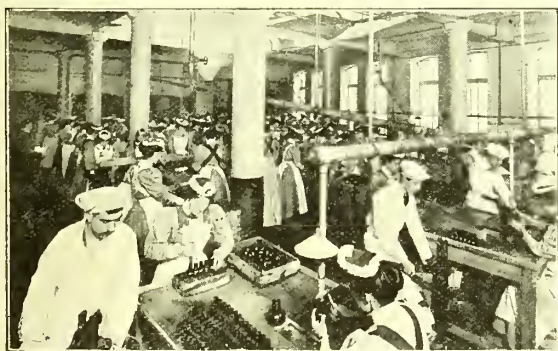


MACHINERY FOR POWDERING AND SIFTING BEEF FIBRIN.

every conceivable manner as to colour, consistence, flavour, and nitrogenous content.

Passing on to the bottling-floor I was struck with the trouble taken in cleaning the bottles. Before the bottles are re-washed each one is held over a rapidly-twirling wooden spindle with the object of detaching any glass splinters which, as pharmacists know, are generally found in the moulded bottles. The washing of the inside of the bottles is done by pressing the mouth of each bottle over a jet of water under high pressure, the jet acting automatically. The bottles are subjected to several other processes before they are ready for use, but these two struck me as being of particular interest. The bottles are filled from taps attached to the system of pipes which conduct the material from the factory on the upper floor. After they are filled the bottles are closed with corks previously dipped in melted paraffin and then capsuled. The bottles are again washed, dried, polished, and passed on to the labellers. The labelling and wrapping are done by women, who, after some practice, are able to do these operations at an astonishingly quick rate. The women are uniformly dressed in becoming striped blue dresses with spotlessly white aprons and caps.

Although so far I have only mentioned bovril, that was only one of the dietetic articles I saw being made. In another part of the premises there is a chocolate-factory, where the combinations of chocolate and bovril are made.



THE BOTTLING DEPARTMENT.

The bovril is "laid on" to each bench, being led from the upper floor by pipes.

Beef Jelly, Invalid Bovril, Kudos Cocoa, and Bovril Wine were being made in other departments, these specialities being finished off by separate staffs. In one huge room were women busy packing the official Army rations, which, it is

needless to say, are in great demand at present, and after seeing this army at work I have banished all thought that starvation will overtake that other army of 180,000 men who are working for the Empire many miles away.

On one of the lower floors boxes are made, labour-saving machinery being much in evidence there. An ingenious machine for nailing the boxes, where four or six nails were inserted in the side of a box at once, attracted my attention. After walking through these departments I arrived at the ground floor where the engines and the electric-light dynamos are situated. The motive-force used throughout the building comes from two Galloway's tube-boilers working at 150 lbs. pressure; the exhaust steam is utilised for evaporating-purposes. The factory is lighted with electric light, the inverted arc with its beautifully-soft light being employed to a large extent. There is here also an artesian well, 500 feet deep, that yields a magnificent supply of pure water, which, after filtration, is used for the various purposes of the establishment. In the packing and storing depart-



THE LABELLING AND WRAPPING DEPARTMENT.

ment, which is on the ground floor, I noticed an excellent system of overhead tramways for moving heavy crates of goods about, which must be a great saving of labour. After climbing innumerable stairs I once more passed through the general offices and down the marble staircase, ushered out by a liveried commissioner, and reached the street, conscious that I had seen what is probably the largest and



A PORTION OF THE PACKING-FLOOR.

The bottles of bovril are here packed into the divided cases, and the cases nailed down.

best-appointed factory and offices of the kind in London. Everybody knows how big the capital is, but few give thought to the fact that fifteen years ago Bovril was unknown—at least, in name. In 1886 Mr. Lawson Johnston startled many people by improving his "fluid beef" and placing it in public bars as a rival to alcoholic stimulants and the unnutritious *café au lait*. That it filled a vacant place in public requirements needs no telling, but the notable thing is that Mr. Lawson Johnston was as sure about the future of Bovril before a bottle of it had been sold as he is to-day when it is worth millions of money. I look upon these gigantic buildings in Old Street less as the outcome of an idea than as a monument of enterprise and successful advertising.

I mentioned just now the Bovril war cables which chemists in the country may not have seen so much of as we

have in London. Immediately upon the receipt of any important despatches, expert cyclists dressed in khaki uniforms, with a red sash bearing the legend "Bovril War Cables," are despatched to most of the suburban districts, and in a few minutes the shops in which the telegrams are displayed are surrounded by an interested crowd. At Norwood, Hammersmith, and many other places, the news of the relief of Ladysmith was thus received over half an hour in advance of that from any other source. It is interesting to note that the company also wired the news of the relief of Ladysmith to the headmasters of the principal schools in the Kingdom, and in a large number of cases the grant of a half-holiday followed the reading of the telegram.

OPTICAL CENTENARY.

My next visit was to Mr. Henry F. Purser, 33 Hatton Garden, E.C., who is the agent for the Rathenower Optische Industrie-Anstalt, late Emil Busch. This firm turn out an excellent series of lenses, but their goods are perhaps not so well known to chemists as they deserve to be. Two good lines are the "Aplanat," the "Rapid," and the "Wide-angle" lenses. The "Rapid Aplanat" is made of Jena glass, and a half-plate lens is not much bigger than a quarter-plate lens of the ordinary French and English models. I also saw some of the caskets or vade-mecum sets which this firm manufacture. The improved set contains three optically-worked orthochromatic screens, two correcting-lenses, and seven single lenses which, used singly or in combination, give twenty-nine different foci of rectilinear, wide angle, and landscape-lenses. The correcting-lenses enable the combinations to be worked at larger apertures with better definition, and are slipped in a slot in a similar manner to a Waterhouse diaphragm. A set such as described costs about 3*l.* 10*s.*

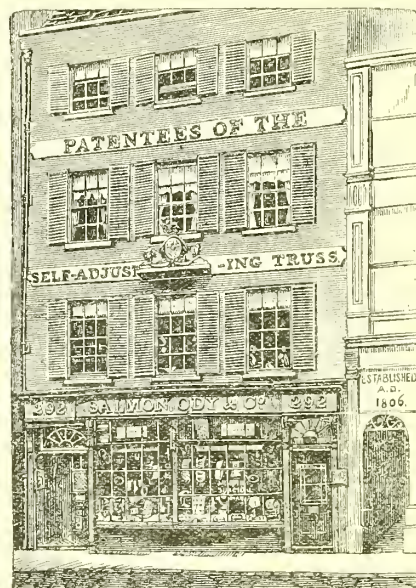
I had an interesting chat with Mr. Purser about the coming century of the foundation of the firm he represents. It appears that a hundred years ago a clergyman, who was appointed to the pastorate of what was then the small agricultural village of Rathenower, obtained permission to augment his income and that of the parish by grinding lenses, as he had a knowledge of optics. The industry thus commenced has grown until now 7,000 men are employed at the manufactory. The clergyman, August Duncker, educated his son in the construction of optical instruments by mathematical rules, and when he succeeded his father the scientific side of the construction of lenses was more fully developed. Emil Busch, the nephew of this son Edward, was a good business man, and on his accession to the concern he developed it in a rapid manner, and did much to build up the reputation of the firm. He introduced the manufacture of telescopes and opera-glasses, and secured contracts for the continental armies and navies for field-glasses. Emil Busch, having no son to succeed him, sold the business to the Rathenower Optische Industrie. The centenary festivities are to be held in August, and are to be on a large scale. The rejoicings include the unveiling of statues of August Duncker and Emil Busch.

Our talk then turned to the question of army field-glasses, which are at present in great demand. The Busch army-glass is not one of the expensive prism-glasses, but is claimed to give a reasonable magnification so that images illuminated fairly well can be readily distinguished. The cases I noticed are khaki coloured, as indeed most things in London are just now.

REMOVING AN OLD LANDMARK.

The Strand improvements are responsible for the "flitting" of many old-established houses, and amongst them I observed recently Messrs. Salmon, Ody & Co., who rank with the oldest surgical-instrument makers in London. Their premises at 292 Strand, illustrated herewith, are exactly the same in appearance as they originally were in 1806. They always had an attraction for me, and seeing that the exigencies of modern progress had doomed to obliteration this link with the past, I ventured to call, and was courteously given many interesting particulars regarding the old-established concern and the genesis of the well-known truss. In a more or less primitive form trusses or hernia-pads have been in use for centuries. Metal hoops with pad attached sustaining the bowel were worn in the

seventeenth century, and steel springs were used in France in 1700. In 1780 Timothy Sheldrake introduced the spiral-spring truss, and the next one was that for which Robert Salmon obtained a patent in 1806. Salmon was bailiff to



Francis, Duke of Bedford (a great sufferer from hernia), and being an ingenious fellow, with a turn for mechanics, he invented and constructed for his master's use the truss in which the spring passed round the opposite side of the body to that on which the hernia descended, and the pad was attached to a ball-and-socket joint, so that it might more accurately follow the movements of the body. This instrument proved so efficient that the Duke recommended it to King William IV., who was likewise a sufferer, and a royal warrant, which the firm still treasures, was obtained. The success of the truss thus assured, Salmon approached his friend John Ody, then proprietor of a successful chandlery business in Clare Market, with a view to making more of the idea that Duke and King afforded. The necessary capital was secured, and a successful business began. Our second illustration is a reproduction of the original picture painted

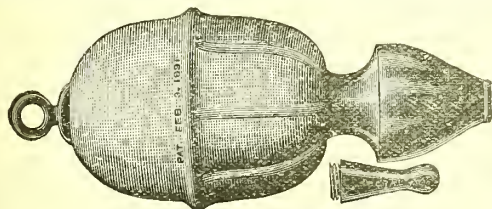


by Mr. T. Pollard, R.A., in 1899, and depicts Mr. John Ody in his gig as he used to drive about the country in those days disposing of the goods of his firm on sale or return. The patent truss was really the backbone of the business for many years, but other articles were not neglected, so that the Strand shop became a regular surgical-instrument depository, and in later years elastic bandages, stockings, surgical, and especially deformity, instruments of all kinds have been added. Owing to the general upset of the premises attending the compulsory removal I was unable to inspect the earlier ledgers of the firm, but I noticed as far back as 1855 the names of many firms well known in the drug-trade, such as Messrs. Gale & Baker, Glaisye &

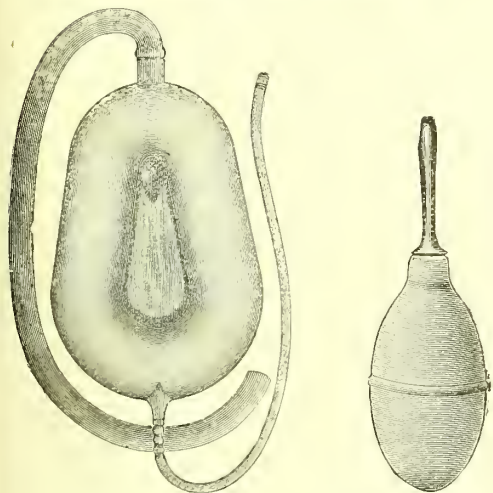
Kemp, Corbyn & Co., Randall & Son, and Morgan Brothers. The patent truss was supplied by contract to the Naval and Military Medical Boards, and was taken up by the East India Company for use in their hospitals during the Indian wars. A glance through these old day-books also discloses the names of many persons who were customers of the firm. Amongst the illustrious dead who had comfort in life from Salmon & Ody were General Lord Abinger, the Bishop of Antigua, Froude the historian, Jenny Lind Goldschmidt, and Dr. Newdegate. The upper floors of the premises contain suites of rooms, once the dwelling-house, in which are some fine satinwood panels, and the general air of ancient solidity makes it easy for one to imagine the good old days when John Ody lived and ruled there, and was known and respected as a solid merchant and a liveryman of the City of London. In those days every screw used in the construction of the patent truss was made on the premises; the workmen came at six in the morning and worked until eight at night. In the dark winter mornings and nights the sole illuminant was candle-light, and Saturday was the same as any other working day. The good workmanship of these artisans of a past generation helped undoubtedly to make the name and fame of the S. & O. truss throughout the world.

RUBBER GOODS.

A recent visit to the B. F. Goodrich Company at 7 Snow Hill, E.C., revealed something of the extent to which rubber is used in the production of commercial commodities. In that establishment I saw rubber in nearly all its conditions of manufacture, for this firm supply everything from the simple indiarubber band to the intricate and delicately-constructed "Goodrich" fountain syringe. The workman-



"PERFECT" SYRINGE.



BED-PAN.

INFANTS RECTAL SYRINGE.

ship and material in each instance are excellent. The most recent production is the "Ladies' Perfect" syringe, of which we give an illustration. The peculiarity of this instrument is that it is so constructed that a fluid may be injected and then brought back into the bulb without spilling. The bulb is of rubber, and the operator simply pushes the ring to secure expulsion, and pulls it back again after a suitable time has elapsed. The tips and ring are of vulcanite. We also illustrate a cartridge-shaped infant syringe and a rubber bedpan with a large outlet and detachable tube. The outlet tube in the latter article may be fixed either on the side or

the end, and the possibility of saturating the bed-linen is precluded. The hot-water bottles (flannel-covered in various patterns) are well-finished, attractive-looking articles, and loops at both ends serve the double purpose of hanging up to drain or fixing (with the aid of a band round the waist) on the body. By the way, these bottles, like all the Goodrich Company's goods, are sent out each in a box, a great advantage to chemists for storage-purposes. Other ingenious articles are a combination water-bottle-and-fountain syringe and an instantaneous tourniquet. The latter is simply a cord of hard, flexible rubber, to which is fixed a vulcanite catch, and certainly no tourniquet could be used more expeditiously or be more effective. Many of these simple instruments have gone out to South Africa within the past few months, and they would be found useful in every factory.

A SPONGE-WAREHOUSE.

The headquarters of the business of Messrs. John Phillips & Sons, sponge-importers, York Road, City Road, E.C., is a formidable building to inspect, and is likely to become more so in the near future. On a recent visit I found it quite a laborious task to make flying visits to the sixteen floors which at present constitute the available working-portion of the building and to make a nodding acquaintance with all the varieties of sponge in all conceivable shapes, sizes, and stages of manipulation harboured there; and when Mr. Phillips informed me that his firm had likewise taken over "the building opposite," which is nearly half as large as their present premises, I reflected that my next visit must needs occupy at least one day instead of an hour or two. In anticipation of the extension which will accrue with increased accommodation, the firm are constructing what promises to be a very fine showroom on the first floor of their present building. The lighting is exceptionally good, and the innovation is sure to be appreciated by buyers wishing to inspect stock in the original packages. On the same floor a fine suite of offices is also being fitted up, and a workroom where part of the trimming is done occupies part of the same elevation. The new building is destined for storage purposes, and a portion will also be set aside for carding and sorting. The firm are large Government contractors, and the war has procured for them many extra orders. Besides supplying the Government with sponges, however, Messrs. Phillips have also given them nine or ten men, whose wives and families they are looking after while the heads of the house are in South Africa.

Recent Wills.

DEVEREUX.—The will of the late Mr. Frederic E. Devereux, chemist and druggist, Wood Street, Walthamstow, and Cherington, Malvern Links, Worcestershire, who died in September, 1899, has been proved in London, the value of the deceased's estate being entered at the sum of 8,118*l.* 10*s.* 11*d.*

DURANT.—Probate to the will, with a codicil, of Mr. Frederic Durant, pharmaceutical chemist, 111 Chetwynd Road, Dartmouth Park Hill, and 137 Queen's Crescent, Haverstock Hill, who died on December 16, 1899, has been granted to his daughters Miss Elizabeth Mary Emma Durant and Miss Ada Margaret Durant, and his son Mr. George Cousins Durant, power to prove hereafter being reserved for Mr. Hy. Thomas Durant, another son and executor nominate. The testator's estate was sworn at 3,157*l.* 6*s.* 8*d.*, including 1,172*l.* 2*s.* 1*d.* net personality.

JEFFRIES.—At Somerset House the will of Mr. Henry Jeffries, chemist and druggist, 23 High Street, Guildford, who died on January 5, 1898, has been proved by Emily Jeffries, widow of the testator, whose estate was sworn at 5,787*l.* 10*s.*

JENKINS.—The will of the late Mr. Jabez Jenkins, chemist and druggist, Llysfrann, Pembrokeshire, who died on July 25, 1898, has been proved by Mrs. Mary Ann Jenkins, widow and executrix of the testator, whose estate was sworn at 357*l.* 8*s.*

SPARGO.—Mr. Jas. Alfred Spargo, chemist and druggist, Lowestoft, who died on August 27, 1899, leaves gross estate sworn at 2,184*l.* 18*s.* 3*d.* by his widow and sole executrix, Mrs. Ellen Spargo; the net personality is entered at 2,028*l.* 18*s.* 9*d.*

WATSON.—At Somerset House the will of Mr. Horace Watson, chemist and druggist, Lacey, Lincolnshire, who died on September 17, 1899, has been proved by Mrs. Watson, widow and acting executor of the testator whose estate is sworn at 1,811*l.* 11*s.*, of which 1,326*l.* 3*s.* 4*d.* is net personality.

Photographic Notes.

By a Pharmaceutical Camerist.

THE NEW PRESIDENT

of the Royal Photographic Society is Mr. T. R. Dallmeyer, the head of the firm of Messrs. J. H. Dallmeyer (Limited), Newman Street, W. Mr. Dallmeyer is well known in photographic circles as an authority on optics, and on the formation of the Optical Society he was elected one of the Vice-Presidents. His recent book on "Telephotography" has attracted much attention and given an impetus to telephotography. It was in 1891, at the Camera Club, that Mr.



MR. T. R. DALLMEYER.

Dallmeyer first described his telephotographic lens, which has since been perfected. The stigmatic lenses (series f/6), which Mr. Dallmeyer's firm make have recently been improved by putting the combination of greater focal length in the front instead of behind, so that now, when it is required to use either combination alone, it is only necessary to remove the other, and the required extension of camera is nearly the same for both combinations.

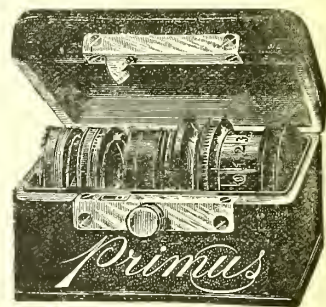
A "ONE-MAN" EXHIBITION.

Intent on seeing what was new in photographic apparatus I called in at the Manchester Hotel, Aldersgate Street, E.C., to see the goods exhibited there by Messrs. W. Butcher & Son, Blackheath.



beginning with stand-cameras, I noticed that the 42s. set is now fitted with a roller-blind shutter and R.R. lens, which makes it a really cheapline. The "Midg." series of hand-cameras is new; the 21s. one takes a dozen plates, and has a speed-adjustment for the shutter which I have not before seen on a camera at the price. No. 4 in the series, selling at 84s., only requires one movement of a lever at the side to make the exposure and change the plate. This is a

contrivance which should banish uncertainty which often troubles photographers as to whether the plate has been changed or not. The "Prim" series of folding hand-cameras is made in four kinds, selling at from 21s. to 90s., according to the fittings. In sundries there is a new metal negative-box, which has the advantage of taking up much less space than a wooden one. The bottom and top of the box are padded with felt so that the negatives cannot rattle, and there is an index-card to the negatives intended to be kept in the lid. Another useful thing for dealers—so new that I was the first to buy one—was a box of lens-caps. A box contains a set of a dozen assorted sizes of lens-caps, so that a dealer can replace a lost lens-cap accurately in a very short time. The negative washing and draining racks are now all fitted with square grooving—an improvement on the V-shaped grooving usually adopted. In casket-lenses there was a good variety, the smallest casket selling for 25s., giving many combinations of $\frac{1}{4}$ -plate lenses. Photograph-albums are shown in five series, the designs being new ones. There is a special discount on a 2l. order for albums. I do not remember if I have previously mentioned the stock photographic catalogue which this firm produce; the firm's name does not appear anywhere in the list, but there is a space for the dealer's name on the cover. The lists are supplied at a cheap rate, and are a very good way of working-up the photographic side-line. The exhibition is, I understand, to remain open for another week, and any London chemist who wants to see what is new in photography would do well to pay it a visit.



PHOTOGRAPHIC PRINTING.

Messrs. J. Townsend & Son, Exeter, have got out some novelties in printing for the use of photographic chemists. The photographic-solution labels I referred to last year still have the distinction of being the prettiest on the market. The new leaflet price-list is a good idea. The front of the circular bears on it a half-tone block from a photograph and artistic designs and space for name and address, whilst inside are enumerated all manner of photographic chemicals and apparatus, with prices. A few suggestions to beginners are given on the back page, and are sufficient to ensure that the list will not be lightly thrown aside by any amateur into whose possession it comes. Photographic chemists should get samples of this printing.

ZONE-PHOTOGRAPHY.

I was fortunate in being able to attend Professor R. W. Wood's lecture on "Diffraction Colour-photography" at the Royal Photographic Society's House in Russell Square. I would not have missed it for a good deal. The professor is a young man with a shaven face, and has sufficient American accent in his voice to make his manner of delivery absorbingly interesting. I need not say anything about the diffraction-process, as it has been dealt with in THE CHEMIST AND DRUGGIST already, but the other new thing he spoke about—zone-photography—may be new to many of your readers. A zone-plate is made by photographing a large sheet of paper on which are drawn concentric rings, gradually decreasing in width from the centre. A reduced negative is then made, and from this is made a transparent positive in bichromated gelatin on a small glass plate, about the size of a shilling. The resulting plate looks like plain glass, and is used in place of a lens or a pinhole for taking photographs. A peculiarity of the use of a zone-plate instead of a lens is that it has three or four foci, and, whilst giving fairly sharply-defined images, has a secondary blurred image superposed. The exposure, using a rapid-plate, was said to be about half-a-second. Zone-plates are stocked by Messrs. Newton, Fleet Street, and I hope to make some experiments with them before long.

War Notes.

TRANSVAAL AND O.F.S. SUBSCRIBERS.—Any subscribers of *THE CHEMIST AND DRUGGIST* whose places of business were in the Transvaal and Orange Free State, and who have not received their copies since the war broke out, are requested to send their names and addresses to the Publisher, 42 Cannon Street, London, E.C. We have reserved their copies of *THE CHEMIST AND DRUGGIST* and copies of the *DIARY*, and these we shall send to them as soon as they inform us of their addresses. This note also applies to subscribers in the beleaguered towns in other parts of South Africa whose supply of *THE CHEMIST AND DRUGGIST* has been stopped by the Post Office owing to the war. We expect that our subscribers in Colesberg, Kimberley, and Ladysmith have by this time received their copies, but the foregoing also applies to them.

CAPTAIN W. B. ROBINSON, of the firm of Messrs. Robinson & Sons, London and Chesterfield, surgical dressing and absorbent-lint, &c., manufacturers will, it is expected, shortly proceed to South Africa on active service in command of 110 men, forming the second contingent of the Derbyshire and Notts Volunteers.

A PRISONER AT PRETORIA.—Our Cape Town correspondent has received news of Trooper A. F. Wood, a prisoner of war at Pretoria, captured at Mafeking on December 21.



TROOPER A. F. WOOD.

he stated that he is being treated kindly, and wished to be reported well. Before going on active service Mr. Wood was employed by Messrs. P. J. Petersen & Co., Cape Town, as a traveller. We are able to give a portrait of Mr. Wood, who was a trooper in the Bechuanaland Protectorate Regiment. He has been connected with the wholesale drug-trade since he was 12 years old—that is about eighteen years—when he entered the employment of Messrs. Hearon, Squire & Francis, of Southwark. After being with them for five years he entered Messrs. Curling & Co.'s employment, remained with them seven years, and three years ago went out to Messrs. Petersen & Co. One of his former employers tells us he is "a very good fellow."

ANOTHER REPRESENTATIVE OF THE WHOLESALE DRUG-TRADE has gone out to South Africa as a Volunteer. This is Sergeant Frank L. Briggs, of the 2nd Tower Hamlets Engineers. He was formerly with Messrs. H. Gilbertson & Sons (Limited), and has lately been traveller for Mr. A. Berliner, maker of cotton-wool and other surgical dressings, Worship Street. Mr. Briggs is an ardent Volunteer, and, having passed the somewhat stringent medical examination for those going to the front, was appointed to take charge of a section from the 2nd Tower Hamlets Engineers, which will join the 26th (Field) Company of the Royal Engineers.



SERGEANT BRIGGS.

ST. HELENS AND ITS MAYOR, Mr. Joseph Beecham, have sent a congratulatory message to the officer commanding

the 1st South Lancashire Regiment, who so bravely stormed Pieter's Hill, on the road to Ladysmith, last week. There are 250 to 300 St. Helens men in the regiment, and the Mayor has taken a great interest in the regiment throughout the war.

MR. GEORGE RANKIN, a Minor man, who hails from Forfarshire, has had similar experience to other British chemists in the Transvaal. Mr. Rankin is now at home, and he writes to us as follows in regard to his ejection from the country last October:—



MR. GEORGE RANKIN.

I have been in business in Klerksdorp, S.A.R. (ninety miles south of Johannesburg), for nearly seven years, and when the war started I had every confidence that I would be allowed to remain to carry on my business. My anticipations were fulfilled, and I—along with my brother, who is my assistant in the business—was given a permit to remain in the Transvaal. However, three weeks after I was visited by the sergeant of police, under orders from the Landdrost, who asked to see my permit; on receiving it he placed it in his pocket and told me that it was cancelled, and that I had to get out of the State by a certain time, which left me exactly forty-six hours to fix up everything—shop, house, &c. My brother was dealt with in the same manner, along with two local clergymen and a Scotch storekeeper; and, by the way, also a lady hospital nurse (English). I luckily managed, in the short space of time at my disposal, to get a neutral chemist to look after my place while the war continued, which, according to a letter I received dated December 29, 1899, he is still doing. I send you the passport given me to cross the frontier to the only port open there for anyone coming from the Transvaal—viz., Delagoa Bay.

We reproduce the passport, the original of which is a quarto sheet of paper. Although printed in Dutch, there is little

PASPOORT

in termen van Uitvoerende Raadsbesluit, Art. 800, dato 27 September 1899, zooals gepubliceerd in Art. 10 Gouvernements-Kennisgeving No. 534 «Buitengewone Staatscourant» dato 28 September 1899.

PASPOORT voor den Heer (a) Geo. Rankin *ex verhoor*
om per (b) peroostrein te reizen van Klerksdorp
naar Delagoa Baai



(d) *Handtekening*
Wm.

- (a). Indien vergezeld van familie en bedienden, het getal opgeven.
(b). Invullen te voet of per andere reiseigenheid.
(c). Plaats en datum van afgifte.
(d). Naam en titel van den ambtenaar die 't Paspoort uitgaf.

Voorlopig paspoort geannuleerd.

difficulty in determining that it permits Mr. Rankin to travel by railroad to Delagoa Bay. We understand that it is Mr. Rankin's intention to return to the Transvaal as soon as the way is open, and he informs us that he is prepared to take up one or two commissions in lines connected with the drug-trade. His business address is c/o *THE CHEMIST AND DRUGGIST*, 42 Cannon Street, E.C.

DURING THE SIEGE OF LADYSMITH, according to one of the besieged correspondents, condensed milk sold at 10s. a tin, while such articles in everyday use as rice, starch, maizena, curry-powder, &c., had vanished in the early days of the siege. Violet-powder was impounded, and transformed into mysterious blanchanges. Clothing also ran short, especially for the feet, and men's socks were very scarce. It appears that the drug-stores have been cleared of their stocks of physis.

GENERAL MACDONALD'S BROTHER is a chemist in Okehampton, Devonshire. A distinguished Scotch pharmacist wrote to us some time ago giving interesting reminiscences of "Fighting Mac," whom he knows well through having been a fellow-assistant with the Okehampton chemist for two years. This is recalled to us by the report that the Duke of Cambridge, who is the official head of Christ's Hospital, Newgate Street, has offered a presentation to Mr. Macdonald's son, Donald, aged ten, who will remain at the Bluecoat School till he is sixteen.

THE RELIEF OF LADYSMITH caused a scene of jubilation amongst the staff and employes of Messrs. Evans, Sons & Co., 56 Hanover Street, Liverpool. Business for the time was forgotten, and everybody cheered wildly for the victorious generals and the army at the front. Patriotic songs and the National Anthem were sung, and, later, a monster procession some 700 strong was organised by one of the staff, and headed by Mr. E. J. Lewis bearing the Union Jack, paraded the principal streets of the city. Returning to Hanover Street, another scene of enthusiasm was witnessed, and the proceedings were fittingly terminated by a collection on behalf of "The gentleman in khaki ordered South."

SOME THINGS IN THE WAR which are side-issues to the *Sphere* are matters of direct interest to the drug-trade. "I reproduce," says the editor of that new weekly, "two scraps of paper of infinite value to Mr. Atkins. One is the label of the dressing which every soldier carries with him in a small pocket in his tunic—

WAR OFFICE MEDICAL DIVISION

FIRST FIELD DRESSING

Tear Black Thread in centre of long stitch. Apply first Wool Pad; second, Gauze; third, Waterproof. Fasten lightly with Bandage and Pins. If two wounds, put pad on one, gauze on other, and divide waterproof.

S. MAW, SON & THOMPSON, LONDON

In another small pocket on the other side is the identification-card. In cases of mutilation this enables the search-parties sent out after the battle to immediately identify the soldier. The card supplied to the City of London Volunteers, one of which I am able to reproduce, appears to be

No. or Name

Rank or Regt.

Wound

Treatment

Signature of Surgeon

adapted also for use as a hospital-card, to place over the man's bed when he has been removed first to the field-hospital and thence to the base. The field-hospital is situated as near the actual scene of the fight as possible.

There temporary dressings are applied until the case can be sent to the base-hospital for thorough investigation."

FOR BOER FLIES, NOT FLYING BOERS.—Mr. Christy Strong, of Reading, has presented 10,000 "Cobweb" fly-papers to the War Office for use in the military hospitals in South Africa. The consignment was sent out by the *Doune Castle* three weeks ago.

A MILITARY CORRESPONDENT has evidently been touched by the complaints uttered by some of the civil compounders who volunteered for service in South Africa, published in recent issues of THE CHEMIST AND DRUGGIST. We think our subscribers will read his letter with some amount of pleasure:—

Field Hospital, Queenstown, Cape Colony,
February 5, 1900.

There is no military compounder now in King William's Town, part of the troops formerly in that station having been ordered on service to Stormberg, and part is stationed here. I have read in your columns a few letters *re* enlistment of chemists in the Royal Army Medical Corps. I was myself a student of the Society, and my name is, no doubt, still to be found enrolled on your books. I enlisted in the R.A.M.C. with much the same expectations as your correspondents, but they were shattered too. Like some of the latter, however, I also looked on the bright side of things, and determined to grin and bear it. The sudden change from a sort of do-as-you-please kind of existence to the strict rigour of army discipline is not very nice, but after a bit the recruit begins to like the change and esteem that discipline. In fact, he becomes (that is assuming he is a steady sort of chap) enamoured of his new position. Then, again, unless he goes in for promotion he can never expect to be regarded as a qualified compounder of medicines. There are little details like this that seem to the outsider rank red tapeism, but when one looks closer into them everything is fair. Regulations have been framed for the guidance of each branch of the Service, and the man who enters the R.A.M.C. becomes a soldier, and thereby makes himself subject to these regulations. It matters not whether the latest addition is an M.D. or a newspaper-vendor; I claim that it is but just that the latter is as much entitled to advancement as the former. Many a man, not exactly illiterate, but whose education does not by any means come up to the boiling-point, has, after a service of four years in the R.A.M.C., acquired such a knowledge of pharmacy and its co-sciences as to entitle him to equality with the former student. This, of course, is due primarily to the spirit of instruction which permeates the training-school of the corps at Aldershot. The instruction there given is practically illustrated, while theory is in abundance. It is when the recruit reaches the hospitals, however, that the practical work commences in earnest. It is a pity that every pharmaceutical chemist could not go through such a training. In a military hospital the duties are various, and everyone cannot be a compounder. With reference to your correspondents who enlisted in the corps, and who consider that they ought to be treated at least as sergeants, I must put it down as bosh. It would be an injustice to see civilian knights of the pestle strutting about as sergeants while there are men in the corps qualified as compounders, and whose army experience in that line both in peace and war has been considerable, who would be under the beck and call of the aforesaid. I admit, as I have said before, that their new position is no sinecure, but let them, if they wish to show their patriotism—which I understand was the underlying motive for offering their services—stick to it.

One of the writers, I see, complains about the rather downy condition of the "biscuits," but I would venture to point out that if he is sent to South Africa he will have to lay himself down on a bed which is not so soft, and occasionally he may have the satisfaction of sleeping in "rooms" which are not whitewashed, and even sometimes he may not be compelled to sleep within walls at all. I hope by the time this reaches you the aforesaid complainants may have swallowed the pill and accepted their lot.

PICRIC ACID: COALS TO NEWCASTLE.—A cargo of about 20 tons of picric acid is expected to arrive in the Tees from Germany this week. It will be discharged at the Middlesborough Dock and reloaded for carriage to the works of Sir W. G. Armstrong, Whitworth & Co., Elswick-on-Tyne, for the purpose of making lyddite. As soon as the acid arrives in the Tees it will be taken over by the War Office authorities. This will be the second consignment of the acid that has been shipped from Germany to Newcastle, *via* the Tees, within the past three weeks.

KIMBERLEY CHEMISTS.—It may be interesting to state that the last word chemists in Kimberley had from the outside pharmaceutical world before the relief was sent them by THE CHEMIST AND DRUGGIST'S Cape correspondent by heliograph on February 7. The message had to be of the briefest character, for heliograms were limited to twelve words, including the addresses.

A Tercentenary Celebration.

ON Friday evening, March 2, the Faculty of Physicians and Surgeons of Glasgow gave a *conversazione* in celebration of the tercentenary of the Faculty. Upwards of 700 members of the profession, including several ladies, responded to the invitation, and they were received by Dr. Hector Cameron, the President. In the course of a formal welcome the President said the Faculty received its charter from James VI. of Scotland on November 29, 1599. The members had celebrated the occasion on the corresponding date last year by a dinner, but this *conversazione* was on a wider scale, because the members wished the profession in the West of Scotland to be associated with them in formally celebrating their three-hundredth birthday.

Professor Sir William Gairdner also addressed the company, referring to the connection of their President with one of the greatest revolutions in surgery since the time of Ambroise Pare—namely, the introduction of a-septic surgery. Dr. Cameron was one of those who were most closely connected with Professor Lister in the experimental development of that movement, which in its early period was carried out in the Glasgow Royal Infirmary, where by the antiseptic system a hotbed of disease in some of the surgical wards had been converted into the fine sanitary hospital it had been ever since. They should not lose the credit of that, and he thought Dr. Cameron was the man to give them a detailed history of that early period, and the part taken in it by himself in connection with Professor Lister. He recalled these facts because many of the younger members of the profession might not be aware of Dr. Cameron's connection with that period. (Applause.)

A very fine display of objects of interest was laid out in the various rooms of the building, including a large collection of surgical and dental instruments, models of hospital-appliances, microscopes and slides, including a new projection microscope, showing the development of the vertebrate eye, Röntgen-ray apparatus and photographs, a new phonograph, and a display of wireless telegraphy. The most interesting part of the exhibition to pharmacists was the very fine display of drugs, pharmaceutical products, and medical sundries arranged and shown by Mr. John McMillan, chemist, St. George's Cross. Considering the small amount of space available the exhibition was most valuable and complete, and reflected great credit on Mr. McMillan and his laboratory-assistant, Mr. James Thomson, who arranged the exhibits. The most important was Mr. McMillan's own exhibit, which occupied a stand running the whole length of the room. On this was arranged a fine collection of crude drugs and alkaloids, together with a unique display illustrating the principal features of the 1898 B.P., these including syrups, liquors, pills, lozenges, and suppositories, pessaries, bougies, cachets, &c. Most of these were from Mr. McMillan's own laboratory. Some of his own specialities, such as codeia-jelly, sublimate isinglass-gauze, and chicken and bone drainage-tubes were also shown.

To add greater interest to the collection and to make the exhibition as "up to date" as possible, Mr. McMillan had received the co-operation of a large number of leading houses who are makers of specialities. The following were well represented by tastefully-arranged exhibits either on special stands or laid out on tables, and the large company who thronged the room appeared to appreciate the display.

MESSRS. G. VAN ABBOTT & SONS, London, showed an assortment of goods for diabetic and obesity patients, including gluten-bread biscuits and flour, ginger-biscuits, caraway-biscuits, almond-cakes, coconut-biscuits, soyabread biscuits and flours, also raw gluten and the starch taken from the ordinary flour in manufacturing the gluten flour and soya.

AÉRATORS (LIMITED), London, provided an attractive display of sparklets, which are coming into greater favour with the public daily, and have been found to be indispensable in the South African campaign now being conducted. Several millions have been sent there to various firms, private individuals, and to the order of H.M.'s War Office.

MESSRS. ALLEN & HANBURY (LIMITED), London, exhib-

ited invalids' foods and byno combinations, and they received marked attention. This firm also showed interesting specimens of the surgical appliances of the Ellwood Lee Company.

MESSRS. ARMOUR & Co., Chicago and London, displayed a fine series of preparations. The extent and resources of this great firm, with the facilities which their abattoirs afford for obtaining animal products in a perfectly fresh state and in quantity, and the scientific organisation which they are able to bring to bear on the production of digestive ferments and animal substances, have placed their goods in an enviable position. Among the preparations shown were powdered and granular pepsin and glycerole of pepsin—a clear and permanent solution, 10 minims of which equal 1 gr. of pepsin (3000). Glycerinum pepsini, B.P., glycerole pancreatin, and liquor pancreatis, B.P. 1898, were also shown, besides other medicinal and dietetic preparations.

The BAYER COMPANY (LIMITED), London and Glasgow, exhibited a number of their medicinal products, including trional, a hypnotic which produces sleep more quickly and with smaller doses than sulphonal; protargol, now much used for urethral and ophthalmic affections; somatose, milk-somatose, and iron-somatose, which were recently the subject of a commendatory note in the *C. & D.*; salophen, the substitute for salicylate of sodium and for salol and phenacetin, as it gives wonderful relief in cases of cystitis; tannigen, the summer-diarrhoea remedy which splits off into tannin after passing through the stomach, and therefore exerts its action on the part most needing it; aspirin, another substitute for salicylates; heroin hydrochloride; and a few more of the company's products.

The AYMARD PATENT MILK-STERILIZER COMPANY, Ipswich, showed specimens in various sizes and styles of their milk and food sterilizers and beef-tea presses.

MESSRS. ALFRED BISHOP & SONS (LIMITED), London, had a large and beautifully-arranged stand of their granulated effervescing products. Besides all the old and favourite combinations we noticed a number of the more recent aspirers to public recognition, such as urotropine, lithioperazine, and varalettes in various combinations, those representing the mineral-water salts being particularly useful and convenient.

MESSRS. BURROUGHS WELLCOME & Co., London and Sidney, exhibited a fine selection of "tabloid" medicine chests and cases and hypodermic cases. They also exhibited specimens of serums prepared at the Wellcome Physiological Research Laboratories. Amongst a very varied and interesting assortment of tabloid-products two series were particularly prominent—viz., "tabloid" mineral-water salts and "tabloid" effervescent medicinal substances, including such drugs as caffeine citrate and magnesium sulphate. Various "soloid" products, such as "soloid" carbolic acid in three strengths, were also shown.

The CHINOSOL HYGIENIC COMPANY (LIMITED), London, exhibited chinisol in various forms and combinations; also argentol, a compound of silver and chinisol, which forms non-poisonous and non-irritating dusting-powder for indolent ulcers and suppurating surfaces.

MESSRS. THOMAS CHRISTY & Co., London, exhibited christia and christia lint, besides the following:—Fluor-rheumin, an ointment in which fluarphenetol difluordiphenyl is incorporated—a remedy for rheumatism; epidermin, an ointment containing fluorxylol difluordiphenyl, used for affections of the skin; and antitussin, which contains difluordiphenyl, and has a remarkable effect in whooping-cough; antrophors; bromalbacid, iodolbacid, and chloralbacid (three albumen derivatives of the halogens which have advantages over the alkali salts); amyloform (a combination of formaldehyde with starch) used in place of iodoform; Pictet's ethyl chloride; Cushman's menthol inhalers; glandulen (contains the bronchial gland); glutoid capsules, hydrozone, glycozone, and Gardner's syrup of hydriodic acid.

MESSRS. DUNCAN, FLOCKHART & Co., Edinburgh, had a very interesting display of capsules and beautifully finished perles, Baumol soap (variously medicated), antiseptic preparations, malt extracts, animal extracts and preparations, Duncan's syrup of hypophosphites, glycerophosphate syrup and chloroform.

The FORMALIN HYGIENIC COMPANY (LIMITED), London, showed Alformant lamps for the gasification of formalin tablets, besides Sehering's pure formalin 40 - per - cent.,

which is now so largely superseding sulphur in the thorough disinfecting of rooms. We noticed, also, a newly-arranged lamp called the "Hydralformant," which is similar in construction to the Alformant "A," but contains a reservoir for water, from which steam can be generated simultaneously with the formic aldehyde. This lamp is introduced, we understand, to satisfy those who believe that formic aldehyde acts better in moist than dry atmospheres.

MR. B. KÜHN, London, besides the chinol preparations already noted, showed ethyl-chloride sprays, papain (Finkler) in powder and lozenges, betul-oil, colchi-sal capsules, &c.

MR. WILLIAM MARTINDALE, London, forwarded a collection of his medicinal chemicals and pharmaceutical preparations and specialities, including nitroglycerin tablets (Martindale), erythrol-nitrate tablets, menthol, and several other varieties of tablets, all with chocolate bases; ointments in tubes for ophthalmic use, codeine and apomorphine pastilles; glass capsules of amyl nitrite, ethyl iodide, ethyl iodide and chloroform. Among the granular preparations exhibited was a recently-introduced potassic aperient for rheumatic cases, in which the consumption of sodium salts would check the elimination of uric acid. A further recent Martindale introduction is the portable spittoon, which is made in an improved shape and is of non-corrosive white metal, is inoffensive in appearance, can be easily cleaned, and may be carried comfortably in the breast-pocket. It has a broad basis, so stands firmly on the table by the side of the invalid's chair or bed, and has a convenient folded rim for wiping the mouth, and when in use the lid hides the mouth of the patient from view.

MESSRS. OPPENHEIMER, SON & CO. (LIMITED), London, showed bipalatinoids of ferrous carbonate—indeed, every type of the palatinoid was exhibited to illustrate the utility of the Oppenheimer idea for administering liquids as liquids, or solids as powders, in a form similar to a tiny jubuc. Soluble hypodermics they also showed, as well as hypodermic cases.

MESSRS. POTTER & SACKER, London, exhibited Schieffelin's pills and granules, cocaine discoids, and benzolyptus, and Gibbs's hollow suppositories.

MESSRS. PARKE, DAVIS & CO., London, exhibited a variety of pharmaceutical elegancies, such as standardised fluid extracts (those of aconite, cannabis indica, digitalis, ergot, and strophanthus physiologically tested upon animals), chlorotone, a new hypnotic, analgesic, and antiseptic in crystals and tablets, mercuriol, taka-dia-stase, liquor sedans, ergot aseptic, glycerin suppositories (95 per cent.), and various biological products made in their laboratories at Detroit, and including antidiphtheria serum, antistreptococcus serum, antitetanus serum, antitubercle serum, Coley's mixture, and nuclein. The antidiphtheria serum is certified by the laboratories of the Royal Colleges of Physicians and Surgeons.

The exhibit of the PROTENE COMPANY (LIMITED), London, attracted especial attention both on account of its tasteful arrangement and completeness. Protene is a white tasteless and odourless powder prepared from pure fresh milk; it consists almost entirely of milk proteid (casein). It is a portable and concentrated form of nourishment, unchangeable by climate or long-keeping, and may be incorporated with all solid or liquid foods to increase their nourishing value. Jellies, soups, fancy biscuits, and other appetising delicacies were exhibited as examples of what may be done with protene. Among the medical exhibits of this food the protene diabetic bread was the most interesting. It shows the following analysis:—

Carbohydrates	...	...	2.40 per cent.
Nitrogenous matters	...	...	51.87 "
Mineral matter	...	...	3.30 "
Moisture	...	...	42.43 "

MESSRS. RANKIN & BORLAND, Kilmarnock, showed typical specimens of senna-pods, and also large show-jars of the fluid extract. This firm, we understand, were the original manufacturers of this fluid extract.

SANITARY WOOD-WOOL COMPANY (LIMITED) showed Hartmann's wood wool, wadding, and tissue, accouchement-outfits, catgut ligatures, iodoform and other medicated gauzes.

MESSRS. SEABURY & JOHNSON, London, exhibited medicinal and surgical plasters of every description, breast-plasters, improved rheumatic plasters, mustard plasters

isinglass plasters, &c., Mead's rubber adhesive plasters, various widths on spools, &c., surgical and antiseptic dressings, absorbent and medicated cottons and gauzes, "B.W.B." elastic bandages of various kinds, drainage-tubes, ligatures, corrosive-sublimate tablets, oiled silks, and other surgical requirements.

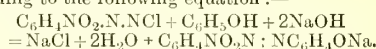
MESSRS. A. & M. ZIMMERMANN, London, exhibited Schering's beta-eucaine, chloralamide, euphthalmine, and urotropine. Kalle & Co.'s preparations were also shown prominently on this stall, including orexin tannate and chocolate tablets. Interesting also were betol and hetokresol, preparations of cinnamic acid, which are recommended by Landerer and others in the treatment of tuberculosis. Dormiol, a new hypnotic, is said to be equal in action to chloral hydrate.

The whole display was exceedingly well laid out, and Mr. McMillan received great praise from all the visitors, many of whom considered it quite as effective as the exhibitions at the British Medical Association meetings.

There were also separate exhibits of dental instruments by MESSRS. CLAUDIUS ASH & SONS, London, and of surgical instruments by MESSRS. WEISS & SONS, London.

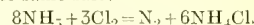
Scientific Progress.

The Estimation of Phenol.—Riegler (*Chem. Central*) describes the following new method for the estimation of carboic acid or other allied phenols. In alkaline solution phenol and para-diazonitraniline yield a red diazo derivative insoluble in water, according to the following equation:—

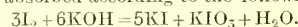


If dilute sulphuric acid be added drop by drop until the reaction is strongly acid, the free phenol derivative $\text{C}_6\text{H}_5\text{NO}_2\text{N} : \text{N} \cdot \text{C}_6\text{H}_5\text{OH}$ separates as a yellow body insoluble in water. To carry out this process quantitatively 50 c.c. of the solution of phenol, containing at most 0.2 per cent., is mixed with 10 c.c. of a 5-per-cent. solution of Na_2CO_3 , and 20 c.c. of saturated solution of the diazo body is added. Then, with constant shaking, 20-per-cent. sulphuric acid is added until the solution is distinctly acid. After two or three hours the precipitate is collected on a tared filter and washed free from acid with water, and dried at 100° . A small correction of 0.0002 gramme per 100 c.c. of liquid is added to compensate for the solubility of the compound. Other phenols and phenol ethers can be estimated with accuracy in this manner.

The Determination of Halogens in Organic Compounds.—An exceedingly interesting and important paper on this subject by Valeur occurs in the current issue of the *Bulletin des Sciences Pharmacologiques* (1900, 93). Valeur is well known for his thermo-chemical researches, and during a series of combustions in compressed oxygen in the well-known Berthelot's bomb, he noticed how instantaneous the combustions were even when chlorine, bromine, or iodine was present in the compound. This observation led to the series of experiments which resulted in the present method being elaborated. As the author points out, the usual period of four to six hours required for a halogen-estimation by either the lime-combustion or Carius's method, is reduced to about half an hour by the present method. The apparatus, however, is somewhat expensive. With chlorine and bromine compounds burnt in compressed oxygen in the bomb, the haloid is partly set free and partly converted into its hydrogen compound. Excess of ammonia solution is placed in the bomb before the combustion, when the following products are formed: CO_2 , free halogen, halogen acid, and traces of nitric acid. The halogen acid is at once absorbed by the ammonia to form ammonium chloride or bromide, and the free halogen reacts as follows, to form the same salt:—



The resulting chloride or bromide of ammonium can be estimated by drying the solution at 100°C , when all the free ammonia and carbonate are driven off. The residue is dissolved in water and titrated with standard silver nitrate. With iodine the reaction is different, and the author uses solution of potassium hydroxide as the absorbent. On combustion practically the whole of the iodine is set free, traces only of hydriodic acid being found. This is absorbed according to the following equation:—



On adding an acid to this solution the iodine is again actively liberated, and can be distilled off. After all the iodine has passed over, a little potassium bichromate is added, which decomposes the traces of hydriodic acid, yielding its iodine in the free state. This is now estimated by titration with thiosulphate solution in the usual way. A number of bodies were used in the experiments, and the results obtained were exceedingly accurate.



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects of general interest.

The Pharmaceutical Council

IS GOING TO MAKE UP ITS MIND.

SIR,—According to the *Pharmaceutical Journal*, the Pharmaceutical Council is going to make up its mind, but it fears that too many cooks will have the broth spoiled before it can bring its influence to bear on Parliament. The Council may make its mind easy, before it can be made up the pot will be off the fire. I have always thought that action ought to be taken through official channels, and I have all that respect for constituted authority which ought to characterise every good citizen, but constituted authority has on this occasion entirely broken down. Under the circumstances, the rank and file have been forced to come forward and push the nominal leaders aside. I do not say that good broth can come out of a pot into which each man has been forced to cast his handful of vegetables; but we have a right to expect more from even this pot than we can expect from the Bloomsbury Square pot, into which nothing has been cast at all. That the rank and file would have loyally thrown their own vegetables to the dogs, and accepted any reasonable nourishing dish the Council presented, there can be no doubt, but the Council has no right to expect us to go with an empty stomach until it makes up its mind about what kind of dish it will cook, especially as the pot is sure to be off the fire altogether before anything is put in it. The fact that the Budget has been brought in three weeks sooner than usual deprives the Council of the last shred of an opportunity to make up its mind. The debate on the Budget is sure to be short, and the second reading of the Companies Bill will come on, in the natural course of parliamentary business, almost immediately. The debate in Committee on Clause 2 will be the most momentous one for pharmacy which has occurred in the House of Commons since the passing of the Pharmacy Act, and will practically settle the long-standing company dispute finally. When this debate is over both sides may disarm, unless, indeed, the clause should be dropped. As the Council is likely to be the De Grouchy of this Waterloo, by bringing its forces up two days after the battle is over, we may congratulate ourselves on the fact that members of Parliament have been fairly well educated on this difficult question by the rank and file.

As the Drug Companies' Association (Limited) evidently wish this clause dropped, it is pretty plain that our right course is to see that it be not dropped. Mr. Ritchie intimates that he will accept no amendment, but this may be taken with a grain of salt. The Government will hardly take up a strong stand on so minor a point. Parliament has shown itself very unwilling to touch pharmacy, and I consider that a Pharmacy Bill pure and simple would have no chance at all; therefore we must strain every nerve, and make the utmost effort within reason, to conciliate opposing factions in the House, in order that a measure of success may be attained. Your suggestion that we even go the length of accepting a *bonâ-fide* qualified managing-director, with a manager in each shop, whose name is posted prominently in the shop and also appears on the labels, should, I think, form the *ultima thule* of concession, but we would do well to go even this length rather than drop the clause. Even this would stop the broken-down shoemaker and grocer from starting life afresh in pharmacy. I do not think that companyism, as applied to pharmacy, is just, or moral, or honourable, in any shape or form, but we can hardly expect the highest form of morality from a House in which nearly every member is up to the eyes in public companies.

I am quite unable to make out the attitude of the chairman of the Public Companies' Association (Limited) as exhibited in his last manifesto. His language is gentle beyond

reason—even lamblike. He has, indeed, a few big-letter lines, but I gather from the tenor of the document that coloured inks have been discarded, whilst he has only used the word "monopoly" once. The acme of abnegation, however, is reached in the fact that he only refers to the millions of customers once. Evidently there is something wrong here. Perhaps he is only making an effort to discard vulgarity and appear in the House as a gentleman, or it may be that the chastening hand of time is stealing over him, and he feels his natural force abating. There is another explanation possible, however; he may have fought, from the rising of the sun to the setting of the same, only to discover that his clansmen have stood aloof from the battle and left him to fight alone, and perhaps he even now contemplates retiring to sulk in his tent.

Dumfries, March 5.

JAMES REID.

The Companies Bill.

SIR,—I am convinced that the plans suggested by the *C. & D.* should command the attention not merely of the Council, but of every man in the craft. Advantage should be taken of the short breathing-time to bring pressure to bear upon this all-important predicament. I have talked to a number of men, and to a local secretary. All acknowledge the necessity of doing something, and yet they will not all unite to go to the front; it is like trying to kindle a fire with stones for fuel. Could not some way be adopted to move the powers that be? I regret to say that individual M.P.'s seldom trouble themselves with other than political questions, and they go with their party. I have at different times corresponded, interviewed, and entrusted a petition to four M.P.'s; they were all affably polite, but no returns had to be recorded. Suppose a petition to the House was got up, and through the local secretaries signed not only by chemists and druggists, but by their friends and customers, the petition entrusted to a trustworthy M.P., thus voicing public opinion, which must be listened to even by the Lord Chancellor? Apathy is fatal, and the inaction of the Council is something more than that—it is obstinacy.

Yours truly,

LAPIS. (20/31.)

SIR,—In accordance with your request I forwarded the reprint *re* Companies Act, with a covering letter, to the M.P. for this town, but have not had a reply yet. Personally, I feel that so long as chemists act in a hostile manner to the companies carrying on pharmacy, nothing will be done that will be of any lasting benefit. I hold that the companies should be invited to help, and not oppose. They are in a strong position, and their assistance would secure great benefits to the trade. Why not propose terms of peace? After all, the companies are not in business for "fun," and they must have a desire to be free from offence against the law. A *modus vivendi* ought not to be so very difficult between ourselves, the qualified, and the companies, the unqualified. I strongly urge consideration of this suggestion, and, if desired, will state broadly the lines on which such a union might be effected without detriment to either parties.

Yours,

DIPLOMAT. (19/64.)

SIR,—I notice that "Ordinary Pharmacist," in the course of a paper in the *Pharmaceutical Journal*, states that "it is not necessary for drug-companies to have directors." If this is true, we are leaning on a broken reed in endeavouring to procure the same. The following is an instance which has come under my notice:—There is a limited company in this town, and although one of the directors died some two years ago, so far as I know a successor to him has not yet been elected.

The company referred to is a typical example of a "one-man company," the managing director being a man who has absolutely no knowledge of pharmacy, but has what probably seems to him as good—money. The company is composed (according to the *C. & D.* of 1897) of eight persons, practically the managing director is the company, as the other seven shareholders do not hold 3/4 amongst them.

Yours faithfully,

ST. CLARE. (22/42.)

[Directors are not required by law. We want to alter that by ensuring that pharmacy-companies shall have directors who are registered chemists and druggists.—EDITOR.]

English Quinine.

SIR,—With reference to our letter of February 8, which you were good enough to publish in your issue of February 10, concerning the article on Canadian business in your issue of February 3, we now have the pleasure to subjoin a copy of a letter received from Mr. R. W. Elliot, President of the firm of "The Elliot Co. (Limited)," of Toronto.

Yours truly,

Stratford, March 6.

HOWARDS & SONS.

Toronto, February 17, 1900.

Messrs. Howards & Sons, London, England.

GENTLEMEN,—Replying to yours of the 9th, the writer has sold "Howards' Quinine" continuously for over fifty years, Howards & Kent's 1-oz. bottles in white cardboard boxes costing 12s. or more, and later Howards & Sons. During all that time Howards' has been the standard for purity in the Canadian market, not for quinine only, but for other chemicals. We certainly never said that any other brand was purer. Some years ago, when prices were higher Howards' brought at least 5d. an ounce more than brands such as Pelletier's, and never at any time has the difference been less than 1d. It is true that latterly we have sold more B. & S., but the difference in the sales in 1899 was only 630 oz., caused entirely by B. & S. being offered for 1d. to 1½d. lower. We have not the slightest doubt that if your quinine was offered at the same price as that of continental manufacturers you would secure the whole Canadian trade, while the sale of continental brands would be nil. We regret that any comparison of quality falsely attributed to us should have been disseminated by the press. With regard, esteem, and confidence, confirmed by half-a-century's dealings,

We remain dear Sirs, yours sincerely,

THE ELLIOT CO. (LIMITED).

R. W. Elliot, President.

[The statement referred to was contained in a report of an interview with Mr. Elliot written by a correspondent of *Sell's Commercial Intelligence*.—EDITOR.]

Citral-content of Lemon Oil.

SIR,—We note in your issue of March 3 an article on the citral-content of lemon oil, by Mr. Parry, containing a reference to a recent paper published in your columns, in which we gave our reasons for stating that genuine oil of lemon contains considerably smaller percentages of citral than is almost invariably assumed. The results we had obtained in the fractional distillation of the oil on a very large scale led us, in the first place, to doubt the correctness of the numbers which were put before us as representing the citral percentage (6 per cent. to 8 per cent.), and we were induced to submit the matter to a closer investigation with the results given in our paper. Mr. Parry condemns the bisulphite-extraction process, and cites, in support of his opinion, the statement of Tiemann that a single extraction of lemongrass oil with bisulphite does not effect the complete solution of the citral. With this we entirely agree, but we may point out that we are not dealing with lemongrass oil, but with an oil containing a very much smaller proportion of aldehyde constituents, which is quite another thing. Acting on the advice of Mr. Chapman, we compared standard solutions of pure citral (geranic aldehyde) in lemon-oil hydrocarbons, which had been freed from every trace of oxygenated constituents by several distillations over metallic sodium under reduced pressure, and have obtained a number of results showing that the bisulphite method, when properly carried out, gives results in the case of these mixtures (containing from 5 per cent. to 15 per cent. citral) which leave nothing to be desired. That being so, we see no reason why the same method applied to lemon oil should not yield equally correct numbers. We contend that the whole of the citral (geranic aldehyde) can be so extracted, and the presence of any citronellal aldehyde or other soluble constituent would, of course, tend to increase the apparent citral-content. We may add that our extraction-process is not carried out in the usual Hirschsohn flask, but in an apparatus which admits of a more perfect extraction and of a more accurate measurement of the unabsorbed portion. A description of this apparatus will be published shortly. We note that Mr. Parry has in one experiment adopted the method of concentrating the oil by distillation under reduced pressure, and of applying the absorption-method to the concentrated portion remaining in the flask—a method to which we referred in our paper. In conclusion, we may say that we have seen no reason to alter

the view expressed in our former communication in regard to the citral-content of oil of lemon. The various methods which have been proposed for the estimation of citral (including the cyanacetic method referred to by Mr. Parry) are now being carefully examined and compared, and the results, together with a review of the whole subject, will be embodied in a paper, which will be published later.

Yours faithfully,

THE LONDON ESSENCE COMPANY.

Camberwell Green, March 6.

Counsel for Council Candidates.

SIR,—Will not some candidate for the Pharmaceutical Council in issuing his election address advocate a fixed legal qualification for public dispensers?

At the present time there is no compulsory qualification for a dispenser holding a public appointment, and nothing in the Pharmacy Act that entitles a Minor or Major man to claim that his is the legal qualification for the appointment of public dispenser. The Apothecaries Act is an old and musty weapon, but it would be extremely awkward if some unexpected legal decision gave the Society of Apothecaries power as the body legally entitled to qualify doctors' dispensers. If I read Mr. Glyu-Jones's interesting legal paper aright, this might happen. I do not understand how the Pharmaceutical Society can continue to raise their cry of "the safety of the public" and never take a step to ensure the uniform qualification of a body of men who, if doctors dispensing be excluded, dispense more than 50 per cent. of the annual total prescriptions, and who train medical men and come into more intimate contact with the medical world in the course of a year than retail pharmacists do in a lifetime. The present position is absolutely unsatisfactory. For example, take the positions under Government control. One branch asks for Major men, another for the Minor, a third is satisfied with apothecaries' assistants or ex-army compounders, and a fourth sinks so low that even *Truth* attacks it. Is there anything to prevent the Government at the close of the present war deciding that all navy, prison, and L.G.B. appointments shall be filled by ex-army compounders? It need not happen if the Pharmaceutical Council exert itself and educate the Government departments as to the value of the statutory qualifications.

Yours truly,

M.P.S. AND PUBLIC DISPENSER. (20/56.)

An Anonymous Riddle.

Why is Mafeking like a chemist's shop? Because it contains a B.P. ALLEN. (73/19.)

Strychnine-mixtures.

SIR,—Your report in this week's issue of a paper on "Practical Pharmacy" by Mr. Davis sent me to my interleaved B.P., where I have a note transcribed some years ago from the *C. & D.* The note refers to the solubility of strychnine in alkaline aqueous mixtures, and is as follows:—

Strychnine is soluble in water 1 in 6,000 or 7,000. Spirit increases the solubility (soluble 1 in 400 proof spirit). Hence, when liq. s. is ordered in a mixture with an alkali, there is no danger of precipitation of alkaloid unless the proportion of liq. s. in mixture exceeds 1 in 60 or 70. 5j. of liq. s. in 8 oz. alkaline mixture is safe.

In such a mixture there should not be more chloroform than is perfectly soluble. A "shake" label in case of doubt.

Tr. nuc. vom. is a quarter the strength of liq. str., and so 5j. in 2 oz. of alkaline mixture would be safe. Here, then, was an instance of the man of theory and the "practical" man being at variance, and in the hope that theory might score I made up the two mixtures containing the liq. strych. and the tr. nuc. vom. along with alkalies. In neither case is there any appearance of precipitation of strychnine after sixteen hours. In my limited acquaintance with prescriptions I have noticed that many contained strychnine with alkalies, but not one has contained an excessive amount. If a mixture contains more strychnine than will remain in solution, I should consider it very risky to trust to a "shake" label. The solubility of strychnine in water is sufficient for practical purposes, and the only safe plan must be to keep within the limit of solubility.

Yours truly,

Helmley, Yorks, March 6.

J. E. ALLENBY.

Legal Queries.

Before sending in a query for reply in this section see if the subject is not dealt with in "The Chemists' and Druggists' Diary," 1900, pages 212-226, and pages 259-262.

13/26. *Secundo Caro*.—We do not think that a County Court Judge would uphold the deductions for loss of time due to clerks coming late in the morning as suggested. The proper course to adopt is to give the clerks notice to leave and re-engage them on their signing an agreement or set of rules, the latter of which might be written in a book for that purpose. Where a large number of clerks are engaged, a set of rules put up in the office might be sufficient if the clerk's attention was drawn to such rules prior to his engagement. We do not think that a clerk would be bound by a set of rules promulgated subsequently to his engagement.

19/32. *Sheep-dip*.—There is little doubt than an unqualified retailer of sheep-dip, giving away a poisonous dip along with the non-poisonous, might be held liable for a sale if the evidence against him could be got. But how can the registrar get such evidence? The Pharmaceutical Council does not authorise prosecutions until the evidence is pretty strong.

11/65. *Bottles*.—The solicitors who have obtained from you a receipted account on the terms that they would pay by cheque and have not fulfilled that promise would no doubt be compelled by a County Court to pay if your evidence is sufficiently reliable.

22/11. *Antipyrin*.—Cocaine hydrochloride is a poisonous vegetable alkaloid, and as such is included in Part I. of the Poisons Schedule. It has been held that the sale of an article containing a poison is the sale of the article itself. A solution of the hydrochloride should not be sold or dispensed unless on the conditions specified on page 212 of THE CHEMISTS' AND DRUGGISTS' DIARY, 1900.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

259/22. *D. C.*—*Stiek Salve* :—

Emp. saponis	...	...	...	5viij.
Adipis...	...	...	...	5j.
Pulv. camphore	...	...	...	5j.

Mix the camphor with the lard, and stir into the previously melted plaster. When cooling shape into sticks, and wrap in waxed paper.

258/15. *Nomen*.—We have succeeded in turning out a presentable ointment by following the formula for ung. lanolini given in "Pharmaceutical Formulas." What you appear more to require is the lanoline toilet-cream, for which a formula is given on page 9 of the same book.

5/32. *Cito*.—The photographic paste you mention is a patented preparation. The recipe for a mountant in "Pharmaceutical Formulas" (page 431) is a good one.

2/38. *Pyro*.—(1) Ext. glycyrrh. liq. is a suitable ingredient for colouring a cough-mixture. (2) *Chilblain-ointment* :—

Pulv. capsici	...	...	...	5viij.
Ol. olive	...	...	...	5xxxij.
Cetacei	...	...	...	5vj.

Macerate the capsicum with the oil for three days, filter, and mix in the spermaceti by the aid of heat. Stir till cold.

For broken chilblains, boric ointment or Turner's cerate is good. (3) *Ringworm-ointment* :—

Cupri oleatis	...	...	...	5j.
Adipis...	...	...	...	5iv.

Mix by melting together. A small quantity to be lightly rubbed into the ringworm morning and evening.

6/24. *Zeta*.—(1) Proctor's "Pharmaceutical Testing" (*C. & D.* office, 2s. 6d.) gives simple directions for testing drugs and chemicals, and does not call for any special apparatus. The most recent table of tincture sp. grs. is that by Mr. J. C. Umney, published in the *C. & D.*, April 30, 1898, page 710. (2) Your question as to an invoice being a warranty was discussed in an Editorial note in the *C. & D.*, January 6, page 22.

1/21. *H. E. B.*—*Luminous Moss*.—There are several luminous agarici known. The thallomes of some fungi and the mycelium of the truffle have also been noticed to be luminous under certain conditions. If you send us a sample of what you have we may be able to identify it.

8/11. *J. W.*—We have been able to make a satisfactory emulsion from the formula, and you may succeed better if you reduce the glycerin to 2 dr. Lanoline-milk (page 10 of "Pharmaceutical Formulas") makes an excellent Winter-cream when modified as follows :—

Powdered white soap	...	...	4 dr.
Powdered borax	...	...	2 dr.
Lanoline	...	...	1½ oz.
Cocconut oil	...	...	6 dr.
Camphor-water	...	...	2 oz.

Rub together in a mortar for ten minutes, then add gradually and with constant stirring—

Lukewarm rose-water	...	...	10 oz.
Simple tincture of benzoin...	...	...	2 dr.
Perfume	...	...	a sufficiency

Shake well.

A different type of winter-cream is the No. 2 formula for glycerin-cream, on page 9.

9/2. *Eucalyptus*.—*Ringworm-ointment for Cattle*.—This is ung. hydrargyri nitratis—an excellent remedy in most cases of ringworm and scab.

246/46. *H. W. C.*—The salt you send, used for putting in the water for boiling peas to make them tender and green, is bicarbonate of soda. You are probably aware that it is customary for cooks to use a small piece of washing-soda for this purpose.

5/72. *G. W. B.*—*Cough-linetus*, as your sample :—

Ac. sulph. dil...	...	...	5ij.
Vin. opii, B.P. 1835...	...	...	5iv.
Glycerini	...	...	5ij.
Acet. rubi idai	...	...	5iv.
Aq. ad	...	...	5viij.

One teaspoonful every four hours, without water, or a dose may be taken occasionally when irritation is felt.

254/22. *Deconiensis*.—(1) *Milk-fever Mixtures*.—The following represent the two mixtures you send :—

A.			
Tr. tolu	...	...	5j.
Muc. acacie	...	...	5j.
Aq. ad	...	...	5viij.
B.			
Liq. cocci	...	...	q.s.
Chloral. hydrat.	...	...	5j.
Glycerin.	...	...	5j.
Aq. ad	...	...	5viij.

One tablespoonful of A. and B. in a little water alternately every half-hour for eight or ten hours, then every hour. Give also doses of whisky or brandy at intervals.

(2) *Milk-fever* is explained in "Veterinary Counter-practice" and Schmidt's new treatment in the *C. & D.*, September 16, 1899, page 492. Your remark that you suppose "milk-fever to be curable" shows that you do not appreciate the fact that it is one of the most fatal diseases of cows, and even now the treatment is more empirical than scientific.

14/31. *B. & S.*—*Inf. Buehu Cone*.—This is prepared by percolating 7 oz. of bruised buchu-leaves with a mixture of 8 oz. alcohol (90 per cent.) and 12 oz. water until 20 oz. of product is obtained. The preparation is more of the nature of a tincture.

14/36. *S. W. B.*—*Influenza-mixtuer*.—We gave a formula for this as recently as February 17, page 305.

255/5. *Subscriber*.—**Ticket-inks**.—The basis of your samples is made by boiling together—

Shellac	...	...	...	...	5iv.
Borax	...	...	...	...	5iij.
Water	...	...	...	...	Oj.

until solution takes place, then filtering to remove the wax, and dissolving in the liquid appropriate aniline dyes according to the colour of the ink desired.

255/18. *E. J. W.*—The **Eczema-tablet** is free from arsenic; it seems to be a thyroid-gland tablet.

2/1. *D. E. D.*—The **Erysipelas-application** which a local contractor highly prizes is a mixture of linseed oil (16), zinc oxide (1), and a trace of oil of rosemary.

259/59. *Pigmentum*.—The following are the compositions of the "very efficacious" horse-medicines you send:—

Gripe-draught.

Ol. terebinth.	...	...	...	...	5j.
Tr. opii	...	...	...	...	5ss.
Ol. lini ad	...	...	...	...	5viij.

Pro dosis.

Fever-draught.

Spt. aether. nit.	...	...	...	...	5j.
Potass. nit.	...	...	...	...	5ij.
Tr. gentianae	...	...	...	...	5j.
Naphthae	...	...	...	...	5j.
Aq. ad	...	...	...	...	5viij.

Pro dosis.

259/52. *Powder*.—The **Influenza-powder** is 5 gr. of phenacetin. "Powder" says the powders are extensively sold in his district against influenza, "one powder to be taken in milk three times a day."

250/69. *Doris*.—The active ingredients in your sample of **Epilepsy-mixture**, which is so effective for fits, are the bromides of ammonium and potash.

8/21. *P. D.*—We would examine the sample you send if we thought it of general interest, but as you do not even say what it is or what it is used for, we cannot undertake it.

231/67. *H. G. T.*—In the reply to you on February 10, page 267, note connection with the Pharmaceutical Society's School has nothing to do with application for the Bell scholarship, which, however, is restricted to those students who subscribe to the Society.

11/4. *R. McC.*—**Iceland Moss Cough-mixture**:—

Acet. scillae	...	...	...	...	5vj.
Acet. ipecac.	...	...	...	...	5iv.
Succ. conii	...	...	...	...	5vj.
Spt. camph.	...	...	...	...	5ij.
Glycer. ni	...	...	...	...	5iiss.
Dec. cetrariae ad	...	...	...	...	Oj.

Dose: Two teaspoonfuls occasionally, when required.

15/32. *J. W.*—**Veterinary-lotion**, for wounds and saddle-galls, to suit your label:—

Ac. sulph.	...	...	...	...	5j.
Alum. sulph.	...	...	...	...	5ij.
Cupri sulph.	...	...	...	...	5ij.
Potass. nitr.	...	...	...	...	5j.
Aq. ad	...	...	...	...	Oiiij.

M.

After cleansing the wound, apply a little twice daily.

11/28. *G. P. B.*—**Foot-powder**, like your sample:—

Salicylic acid	...	...	...	...	5ss.
Boric acid	...	...	...	...	5iv.
Fullers' earth	...	...	...	...	5viij.
Rose-geranium oil	...	...	...	...	5j.

Mix well.

12/38. *F. H. R.*—We have not read the article you refer to in *Pearson's Magazine*, so we are not in a position to supplement the information given there.

13/16. *F. B.*—Refer to *Bayers' Guide* in *DEARY* for refiners of benzole used for making gold-paint.

12/45. *J. L. E.*—The latest information on removing superfluous hair by electricity was given in the *C. & D.*, July 15, 1899, page 97.

13/19. *E. H. R.*—**Straw-hat Varnishes**.—See *C. & D.*, June 17, 1899, page 975.

41/37. *Custor*.—The best method of sweetening and flavouring castor oil is to mix the oil with an equal quantity of glycerin and flavour with either cinnamon or peppermint oil. Another way would be to emulsify 3ss. of the oil with tr. quillaiae mxxx., and add peppermint or cinnamon water to measure 5j.

12/6. *Setag*.—The **Corn-plaster** you send is emp. cannab. ind. c. ac. salicyl., but there are no analytical tests for telling whose make it is.

12/7. *Cronje* sends a powder which he says is used for ulcerated legs and piles. The powder is salol; the good effects which "Cronje" vouches for are probably due to its antiseptic action.

236/30. *N. L. D.*—The whooping-cough powder is beyond us.

15/46. *F. J. C.*—"First" Examination.—Your nearest centre for this is Lincoln. The next examinations are on April 10 and July 10, and notice must be given on a form obtainable from the Registrar, and the fee paid at least fourteen days before the day of the examination. Further particulars were given in the *C. & D.*, September 2, 1899.

14/65. *Bell*.—All the schools of pharmacy that advertise in our columns prepare students for the Bell scholarship examination, and any of them will send you their terms for tuition on application.

11/15. *J. H.*—We do not see how any good in respect to the company-question could be done by the Pharmaceutical Council resigning in a body. It is of course possible for the Council to do so. We presume that the object of your suggestion is that matters, so far as statutory qualifications are concerned, would get into a deadlock, and thus cause inconvenience to companies, but you overlook the fact that the Boards of Examiners for the time being, and the Registrar under the Pharmacy Acts, who happens also to be the Secretary of the Society, are really all that are required to carry out the certification of those who are qualified to be registered as chemists and druggists. The charter and Acts of Parliament do not contemplate such a contingency as the resignation of the Council *en bloc*, but immediately that was done it would be the duty of the Secretary of the Society to call upon the members to elect another Council.

7/64. *Bedfordshire*.—In the ringworm-application containing iodine and calomel mercuric iodide is formed, and this may act as a blister.

5/11. *H. S. K.* (Bombay).—The sample of wax you send is a bleached East Indian wax known here as Calcutta. There is no formula for it, as it is a natural product.

20/11. *Sigma*.—**Ginger-beer Powder** for 1*℥*. packets:—

Acid. tartarici	...	...	...	...	5j.
Gingerin.	...	...	...	...	gr. xv.
Sacch. ust. sicc.	...	...	...	...	5j.
Pulv. sacch. alb.	...	...	...	...	1 lb.

Mix the gingerin and burnt sugar with a portion of the sugar, and then add the acid and remainder of the sugar, and sift.

An ounce packet retails at 1*℥*., and is to be added to a pint of cold or aerated water to form a beverage.

Information Wanted.

Postcard replies to any of the subjoined inquiries will be esteemed.

22/30. Chloride-of-ethyl tubes (empty): where obtainable?

21/1. *Wallace* would be glad if some chemist-dentist could recommend a cement suitable for fastening a sound tooth that has come out to the adjoining teeth so as to avoid the necessity of "crown-and-bridge" work.

Trade Report.

NOTICE TO BUYERS—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted

42 Cannon Street, London, E.C.: March 8.

THE feature of the drug-market this week has been the advance in all spirituous preparations consequent on the increase of the spirit-duties. Otherwise business is quiet, with a firm undertone in many articles. In crude drugs benzoin and ipecacuanha have been in good demand, but the position of the latter article is uncertain. Ergot is obtainable at lower prices, while cod-liver oil is also a trifle easier. In chemicals, tartaric acid is firmer, but citric acid is lower. Borax has again been advanced by the combination. Essential oils of all kinds are unusually quiet, and business is unimportant. The following are the principal changes of the week:—

Higher	Firmer	Easier	Lower
Borax	Acid, tartaric	Acid, carbolic	Ergot
Cocoa-butter	Anise	Acid, citric	Quinine
Elemi	Canary-seed	Oil, cod-liver	Shellac
Linseed	Ipecacuanha	Pot. bichrom.	Sticklac
Oil, clove			Vanilla
Oil, dill			
Spirituous preps.			

Arrivals.

The following drugs, &c., have arrived at the principal ports of the United Kingdom from March 1 to 7 (both inclusive):—Buchu, 12; cardamoms (Mangalore), 35; (Ceylon) 81; cascara sagrada, 183; castor oil (Ital.), 25; (E.I.) 52; (Fr.) 95; chamomiles, 8; cinchona (E.I.), 800; (Ceylon) 136; cochineal, 54; cocoa-butter, 186; cod-liver oil, 879; coriander-seed, 80; croton-seed, 18; eucalyptus oil (Aust.), 59; fennel-seed, 217; fenugreek-seed, 517; galls, 7; gum arabic, 49; gum sandarac, 55; honey (Chi.), 113; (Ital.) 108; iodine, 9; ipecacuanha, 12; kola-nuts (W.I.), 1; (W.C.A.) 1; lime-juice (W.I.), 604; nux vomica, 228; opium, 8; orris (Ital.), 20; quicksilver, 100; quinine (cases), 15; senna, 10; sandalwood, 428; saffron, 4; sarsaparilla, 12; vanilla (Ceylon), 19; wax (bees'), 40.

London Dock-accommodation.

The London County Council will wait upon the President of the Board of Trade on March 15, to urge the necessity of a parliamentary inquiry into the present condition of the docks and port of London, and the best method of remedying the defects in administration and accommodation.

New Chemical-works in Cheshire

The construction of extensive new chemical-works at Cledford Bridge, near Middlewich, was commenced on February 26. They are for the Electrolytic Alkali Company, whose present offices are at St. Helens. Orders have been given for engines and dynamos, and the total cost is estimated at 100,000*l.*

February Trade-returns.

The statistics relating to the foreign trade of this country are again excellent, both imports and exports showing the substantial increases of 2,065,699*l.* and 3,837,443*l.* respectively. The imports of chemicals, dye-stuffs, and tanning-substances, however, showed a decrease of 198,338*l.*, and oils of 137,313*l.*; on the other hand the exports of chemicals and chemical and medicinal preparations increased by 114,000*l.* Our imports of quicksilver show the enormous shrinkage of 1,457,660 lbs. (155,861*l.*) compared with January. The following chemicals were imported in increased quantities: alkali (16,700 cwt.), borax (47,510 cwt.), brimstone (3,207 cwt.), and saltpetre (10,300 cwt.). Unenumerated drugs

show a decrease of 1,633*l.* In exports we note that the United States has again been a good purchaser of alkali—97,138 cwt. against 35,618 cwt. Canada also doubled her imports, and Australasia, Germany, Holland, Norway, and Sweden also show increased amounts. Russia, France, Spain, and Italy all show a slight decline. Our exports of medicines continue to expand—94,713*l.* against 87,217*l.* in February, 1899.

Heavy Chemicals.

[These prices are for market-centres other than London.]

There are practically no new features of special importance to be reported this week regarding the heavy-chemical market. A good all-round business continues to be transacted, and orders are fairly plentiful, although perhaps not quite so numerous as of late. Stocks still keep low, and values for the most part are steadily and well maintained. The general demand from home consuming trades keeps up well. Paper-makers, as they have been for some time past, are exceptionally busy. Dyers, bleachers, and calico-printers also find things rather brisk, whilst carpet-manufacturers keep steadily employed. Soap-manufacturers have little to complain of, as both manufacturing and domestic qualities of soap meet with a continued good demand. The pottery and glass trades keep steadily employed, although they are not quite so busy as they have been. The colour and paint trades are still rather quiet.

ALKALI PRODUCE.—The demand for products under this heading is steadily maintained at unchanged prices. Chlorates are steady. Hyposulphite of soda and yellow prussiate of potash tend dearer.

SULPHATE OF AMMONIA.—Steady, and moderate business is being done. Beekton 12*l.*; Beekton terms, 11*l.* 17s. 6*d.*; London and Hull, 12*l.*; Leith, 12*l.* 2s. 6*d.* Exports from Leith last week amounted to 466 tons.

BORAX AND BORIC ACID are now 10s. per ton higher. Borax crystals, 12s.; powdered, 18s. per cwt. Boric acid, 26s. and 28s. per cwt. respectively.

COAL-TAR PRODUCTS generally are firm, and it is quite probable that higher values will rule ere long. Carbolic acids—crude, 60 per cent., 3s. 3*d.* to 3s. 6*d.* per gal.; and 75 per cent., 3s. 9*d.* to 4*s.* Crystals, 34° to 35° C., 11½*d.* to 11¾*d.*; and 39° to 40° C., 1s. to 1s. 0½*d.* Benzols are flat, 90 per cent., 7½*d.*; and 50 per cent., 9½*d.* Aniline oil and salts are unchanged, the former at 4½*d.* to 4¾*d.* per lb., and the latter at 4½*d.* per lb. Anthracene steady: A grade, 5¾*d.* to 4*d.*; B grade, 2¾*d.* to 3*d.* Pyridin, 4s. 7½*d.* to 4s. 8½*d.* Toluol, 1s. 1*d.*; and pure, 2s. to 2s. 1*d.* Cresote steady, and in good demand at 3½*d.* to 3¾*d.* Naphthas, crude, 30 per cent., 5¾*d.* to 6*d.* Solvent naphtha, 90 per cent., 1s. 4*d.*; and 95 per cent. 1s. 5*d.* Solvent wood-naphtha, colourless, 2s. 9*d.* to 2s. 10*d.*; and miscible, 3s. 6*d.* to 3s. 8*d.* Pitch steady at 36s. to 37s. l.o.b. East Coast.

Liverpool Drug Market.

Liverpool, March 8.

CASTOR OIL.—The upward movement in this is fully maintained, and 3¾*d.* per lb. is now the spot-price of good seconds Calcutta—3¾*d.* having been paid for some parcels. First-pressure French is held firmly for 3½*d.* to 3¾*d.* per lb., Belgian first-pressure at 3¾*d.* to 3½*d.* per lb., and the lower grades at a shade less.

GINGER (AFRICAN).—Stocks are reduced within a very narrow compass. For the small parcels available 35s. per cwt. is asked, but somewhat lower prices are asked for the new crop shortly due. *Cochin* is held for 32s. per cwt., and holders talk of higher prices in view of the small crop.

CALABAR-BEANS.—The first arrival for six or seven years has taken place. Thirteen bags offered at auction and realised 3½*d.* per lb., from the quay. Holders of the small stocks here ask 6½*d.* per lb.

JABORANDI-LEAVES.—A parcel of 55 bales has changed hands on private terms.

CANARY-SEED continues to move slowly upwards: 33s. 6*d.* per qr. has been obtained by holders, and now they talk of raising their limit still higher.

GUM ACACIA.—There is a fair inquiry for all kinds. The supplies of Soudan sorts are small, and prices are well maintained.

TURPENTINE is firm, at 41s. to 41s. 3*d.* per cwt.

CREAM OF TARTAR is quoted fully 1s. per cwt. dearer by foreign agents, but spot-price is unchanged so far.

COPPER SULPHATE.—Very firm, at 25*l.* to 25*l.* 5s. per ton.

ARSENIC.—Powdered white very steady, at 20*l.* to 20*l.* 10s. per ton.

TURMERIC.—Stocks of Madras description have been withdrawn from the market, and holders quote nominally 35s. per cwt.

IRISH MOSS is very scarce, and ordinary has realised 13s. 6*d.*

BALSAM CAPIVI.—There have been no further arrivals, and the market is quite bare.

German Drug Market.

Hamburg, March 6.

Our drug-market shows very little animation, and only a few alterations in prices have occurred.

ALOE, CAPE, is a little easier, at 62m. to 60m. per 100 kilos.

BALSAM, PERU, is quiet, at 15m. to 12½m. per kilo.

CAMPHOR, REFINED, is dull. The manufacturers' prices are unchanged, but second-hand has sold at 420m. per 100 kilos.

CONDURANGO-BARK is a little firmer, at 185m. per 100 kilos.

CEVADILLA-SEED is quiet and lower, at 85m. per 100 kilos., new supplies being shortly expected.

ERGOT OF RYE is dull and depressed, in consequence of lower offers from Russia. The stocks here are very small; the quotation is 375m. per 100 kilos. nominally.

HONEY is firm, West Indian being in good demand.

MENTHOL is dull, at 19½m. per kilo.

QUININE is quiet and without much business, at 49m. per kilo.

QUILLAJA-BARK is quiet and lower, at 27m. per 100 kilos.

SANTONIN is tending firmer; the second-hand stocks seem to be almost cleared. To-day's quotation, 21m. per kilo. (second-hand).

WAX, CARNAUBA, is very firm and scarce; grey is quoted at 150m. up to 210m. per 100 kilos. for fine yellow quality.

WORMSEED.—Very firm, at 60m. per 100 kilos.

OILS.—Cod-liver continues quiet, at 65m. per barrel for non-congealing oil. Castor unchanged.

CARAWAY-SEED OIL.—Firm at 10m. to 11m. per kilo. Other essential oils are unchanged.

Cablegrams.

BERGEN, March 8, 11.15 A.M.:—The cod-fishing here since last report has proved very disappointing, only 5,180,000 fish being caught, as against 6,122,000 at a corresponding time last year. This represents a yield of 5.958 barrels of unrefined oil, as against 6,177 barrels last year. The condition of the market is quiet, 62s. per barrel, f.o.b. Bergen, being the prevailing price.

HAMBURG, March 8, 12.26 P.M.:—Carnauba wax, lycopodium, and castor oil are all firmly held, but ergot of rye is dull of sale.

SMYRNA, March 8, 1.10 P.M.:—The opium market is steady, 100 cases having been sold at prices ranging from 8s. 5d. to 8s. 10d. per lb., f.o.b. Smyrna.

NEW YORK, March 8, 3.12 P.M.:—The state of the market is quiet. The nominal price of opium is \$3 per lb.; senegale root is easier at 44c. per lb.; carbolic acid is lower, 25c. per lb. being the latest price. Golden-seal is in a weak state, 55c. per lb. is quoted. Ergot of rye is easier, at 58c. per lb.; and balsam of peru is also declining, \$1.42 being the price. Ipecacuanha, however, shows a firmer tendency, and is now selling at \$3.10 per lb.

London Markets.

ACID, CITRIC.—Slightly easier, with second-hand sellers at 1s. 4d. per lb. for English; makers quote 1s. 4½d.

ACID, TANNIC.—Very firm, at from 2s. 2d. to 2s. 3d. per lb. from makers.

ACID, TARTARIC, has a firmer tendency at 1s. 0½d. to 1s. 1d. per lb. for English powder, and 1s. for foreign.

AMBERGRIS.—Of fine grey quality the market has been practically bare for some time. At present the nominal quotation for such is about 100s. per oz.

ARROWROOT.—Quiet but steady. At auction on Wednesday good Bermuda partly sold at 1s. 9d. to 1s. 10d. per lb., and St. Vincent's at 4½d. per lb.

ASAFETIDA.—Fine drop is wanted but is almost unobtainable; recent sales have been made at 85s. per cwt. Medium drop has also changed hands at from 50s. to 55s., and good ditto up to 65s. per cwt.

BENZOIN.—Selling steadily at previous rates. Almost all grades of Sumatra have been dealt in, business including good well-almonded seconds at 10l. per cwt.; ordinary seconds (D.T.), 6l. 5s. Part of the 42-case lot offered in auction last week has since been sold at 6l. 15s. for the best, and 5l. 7s. 6d. for the common. Further sales of Palembang, ex-auction, have been made at from 50s. to 60s. per cwt.

Some 60 cases, medium quality, Palembang have arrived this week. On the Amsterdam market 38 cases have changed hands lately at considerably higher prices than the valuations.

BORAX.—Refiners again advanced their quotations on March 2, by 10s. per ton for both borax and boric acid. The quotations are now as follows: Borax, crystals, 17l.; powder, 18l. per ton. Boric acid, crystals, 26l.; and powder, 28l. per ton. Howard's prices are 18s. 6d. for borax crystals, and 20s. 6d. for powder; boric acid crystals, 28s.; and powder, 30s. per cwt.

CALUMBA.—For fair natural sorts 27s. per cwt. has been paid.

DRAGON'S-BLOOD.—Very scarce; the first-hand stock consists of two cases fine and medium block, and no arrivals have taken place of late, so that recent orders remain unfulfilled.

CINCHONA.—The Nederlandsche Veem cinchona-bark department at Amsterdam reports that the shipments from Java to Europe during February amounted to 641,000 Amsterdam lbs., and for the two months of the present year to 1,256,000 lbs. The following are the corresponding figures for previous years:—

	1899	1898	1897	1896	1895
Amsterdam lbs., February	539,000	700,000	456,000	546,000	756,000
January-February	1,048,800	1,653,000	846,000	1,516,000	1,413,000

Our Amsterdam correspondent, under date of March 7, states that 923 bales Ledgeriana and Hybrids, 73 bales and 27 cases Succirubra, and 5 cases Calisaya—total, 79,698 kilos. Java cinchona-bark—have been added to the auction to be held on March 22, so that the total amount is now 4,972 bales and cases Ledgeriana, Officialinalis, and Hybrids; 1,108 cases, 1,228 bales, 52 packages Succirubra, and 5 cases Calisaya—total, 604,482 kilos. Java cinchona-bark.

COCOA BUTTER.—Dearer. In auction on Tuesday 100 tons of Cadbury's "A" brand sold at 1s. 5d. per lb. up to 1s. 6½d., and 5-cwt. cakes at 1s. 6¾d. to 1s. 7¾d.

ERGOT OF RYE is again lower, there being offers of sound Russian from Hamburg at 1s. 8d. per lb., c.i.f., for delivery in four weeks. On the spot 1s. 9d. to 2s. is wanted. Considering the fact that the new crop is not due for about five to six months, the market is somewhat anomalous, and the only explanation is that there are either "bear" sellers or that stocks in Russia are being brought out.

GUM ARABIC.—At the auctions to-day there was an entire lack of interest, and only a few odds and ends were sold. The following prices were paid:—Good palish Karachi, 50s. per cwt. (about 5s. cheaper); low brown Aden (Barbary character), 31s.; doubtful dust, 5s.; Ghatti, fair pale glassy, 23s. 6d. per cwt., subject; low woody ditto, 12s.; and siftings, 5s. Australian brought 14s. Of Bombay gum, pale pea siftings sold at 25s. per cwt.

GUM ELEMI has considerably advanced owing to scarcity. Best white Manila gum is now worth from 140s. to 150s. per cwt., c.i.f. Constantly rising prices have been paid of late, buyers drawing from the Hamburg market.

GUM GAMBOGE.—Prices have an upward tendency, owing to scarcity of good pipe. There have been no arrivals of late.

GUM OLIBANUM.—In auction to-day, 301 cases fair siftings offered, of which 20 cases only sold, at 20s. per cwt. Privately good drop has sold at 45s. per cwt.

GUM TRAGACANTH.—This has been a quiet week with the exception of to-day, when business was done at from 6l. to 9l. for new Persian gum.

INSECT-FLOWERS.—A Trieste correspondent, writing on February 28, reports that the stocks have been reduced in consequence of the active demand for the better sorts of flowers. Good closed qualities are getting scarce, and values are advancing. Open flowers seem to be neglected, but rates are steady, the article being in strong hands. The

following are the current quotations, f.o.b. Trieste:—Open flowers, 44s. 6d. to 46s. per cwt.; half-open, 51s. to 74s.; closed, 84s. to 92s.; and wild, 102s. to 106s. The stock in Trieste at the end of February amounted to 220,600 kilos, against 249,030 kilos.; the receipts during that month were 18,900 kilos., and deliveries 47,300 kilos.

IPECACUANHA.—The feature of this drug is that the Cartagena root is now admitted into the United States, cables intimating this fact having been received in London. It is the general opinion here, however, that the United States will now import the drug direct from Colombia. Since the auctions Cartagena has been sold at 8s. per lb. for fair. Rio root is in good inquiry at from 11s. 6d. to 11s. 9d. per lb., according to quality, but the principal holder is reported to be asking a still higher price. In one quarter it is asserted that there are 60 bales of Rio on the water, but this statement is denied by interested parties. Of Cartagena 26 bales have arrived this week, and there are 15 more near at hand.

MANNA.—Fine flake is practically unobtainable here, and held for extreme prices in Sicily—viz., 4s. 3d. per lb., f.o.b. Palermo, in original cases.

NUX VOMICA is practically unobtainable on this market. For arrival 8s. 6d. per cwt., c.i.f., is asked for Calcutta seed and 11s. for Cochin.

OIL, CAJUPUT.—Sales in Amsterdam, amounting to about 260 bottles, have been made at 61.50 (2s. 6d.) per bottle.

OIL, CLOVE, has been advanced 2d. per lb. in sympathy with the spice. English distillers now quote 2s. 10d. per lb., or 2s. 9d. in twelve W. quarts.

OIL, COD-LIVER.—More business appears to be doing this week, as there are one or two cheap sellers who have booked orders at 60s. per barrel, c.i.f., while others ask up to 63s., at which the finest brands are obtainable.

BERGEN, March 3.—The quantity of fish caught up to the present is now smaller than last year's catch, and there does not seem much hope left of this year becoming a prosperous one as far as the cod-fisheries are concerned. The number of barrels of manufactured oil is, however, slightly larger than that of last year, partly owing to the exceptional fatness of the fish and partly because a greater quantity of the liver has been steamed. The market is weak, and the quotation to-day for non-congealing oil is hardly above 62s. per barrel, f.o.b. The exports to date from Bergen are 836 barrels against 1,291 at the same time last year.

Mr. J. R. Holnuboe, in the course of his report dated February 27, states that the fishing at Lofoten during the month has been very poor, although the weather has been fine. The home market has consequently tightened, and crude oil is getting dearer. The foreign markets are almost inactive and buyers are making bids which do not cover cost price, so that business is almost at a standstill. If the Lofoten fishing does not materially improve during the first days of March—which is the principal fishing month—prices are bound to go up, and only a very rich catch will be able to cause a decline below, say, 60s.

OIL, DILL, has been advanced to 9s. per lb. for commercial and 10s. 6d. for B.P. quality.

OIL, LAVENDER.—Best English is quoted 40s. per lb. net.

OPIUM.—Quiet and unchanged, the business this week being mostly in soft-shipping at 10s. 6d. to 11s. 6d. per lb., according to quality. Druggists' quality is quiet at from 8s. 6d. to 9s. 3d. per lb.

SMYRNA, February 23.—The week has been very quiet, sales amounting to 5 cases only, at 8s. 9d. to 9s., c.i.f. All large buyers finding that no more cheap stuff is to be had from the small holders, have withdrawn from the market. The recent slight concession on the part of these sellers did not meet with the approval of the large interested holders, who, instead of selling their own stock, keep it completely out of the market, and will not sell until prices rise to the parity of 9s., f.o.b. The existing stock on this market is not much over 1,500 cases, of which about 70 per cent. is in the hands of firm holders. It is natural, therefore, that buyers will sooner or later turn to these large holders for supplies, and will be obliged to meet them on their own terms.

ORRIS.—Private advices from Leghorn this week intimate that a further advance has taken place. A Grasse firm has been buying largely in Florence and elsewhere, but they were only able to secure about 30 tons outside the syndicate holdings. Very few parcels are available, and holders abroad are not inclined to make firm offers. Selected

Florentine root is quoted 53s. per cwt., "sorts" and small white, 47s. 6d. to 49s. per cwt., c.i.f. The syndicate price is 80s. for picked c.i.f. London.

PHENACETIN.—A further advance is expected shortly, but meanwhile makers quote 5s. 3d. per lb. for 5-cwt. lots. In second-hand there are sellers at 4s. 6d.

POTASH BICHROMATE is slightly weaker, makers now quoting 4d. to 4½d. per lb.

QUININE.—Since our last report the second-hand market has declined almost daily by fractions, there being plenty of weak sellers, but only small quantities have changed hands. On Wednesday there were buyers at 1s. 5½d. spot delivery, and 1s. 5½d. for May. To-day 1s. 5d. spot is quoted. On the other hand, makers are very firm, and only sell sparingly.

SEEDS.—*Anise* is scarce and wanted, 21s. per cwt. is about the value of Russian. *Carraways* are firm, and higher prices are expected. *Coriander* is selling at 10s. 6d. to 12s. per cwt. for common to good Morocco, and at 16s. to 17s. for English. *Cumin* sells slowly, at 28s. to 30s. per cwt. for Morocco, and at 32s. for Malta. *Canary* is rather firmer, and transactions are larger, the short crop in Turkey last year is beginning to tell on the market. *Linseed* is much dearer, fine bold clean is worth about 60s. per quarter. *Fenugreek* is in good supply, but demand is small.

SHELLAC.—In auction on Tuesday the good supply of 1,200 cases was offered, largely "without reserve," of which about 600 chests sold at 1s. per cwt. decline, fair second-orange TN now being quoted at 61s. The following prices were paid:—Second orange, fine lemony matted, 72s.; good fair palish, 63s. to 64s.; good reddish, 61s. to 62s.; fair ditto, 59s. to 60s.; and weak flat red, 58s. to 59s. per cwt. Button, fair seconds, 68s.; blocky, 60s. to 61s.; and good dark native, 55s. per cwt.

SPICES.—There has been no change of importance in prices this week. *Cochin Ginger* at auction on Wednesday was steady, boldish washed rough selling at 32s. per cwt. Rough limed Japan was bought in at 26s. per cwt. Jamaica partly sold at 55s. to 61s. 6d. per cwt. for ordinary to fair washed. *Zanzibar Cloves* are a fraction dearer than last week; ordinary dull sold at 4½d. per lb., and business has been done at 4½d. to 4¾d. for March-May and June-August delivery respectively. Japan *Chillies* were withdrawn at 50s. per cwt. for fair red. East India *Capsicums* sold at 29s. 6d. per cwt. for dull red cherries, mixed faded. Fine long red picked African sold at 60s. to 65s. per cwt. *Pimento* is firm; one lot of fair quality sold at 3½d. per lb. *Cinnamon* quillings sold at 6¾d. per lb., and chips at 3¾d. per lb. China *Cassia-vera* was bought in at 30s. per cwt. Japan partly sold at 22s. Broken *Cassia* twigs were bought in at 35s. per cwt. *Pepper* is unchanged, with little business passing, and our last quotations hold good.

STICKLAC.—Lower in auction, 106 cases unsifted Siam selling at 35s. 6d., rising to 41s. 6d., but chiefly 36s. 6d. per cwt.

VANILLA—The demand in auction on Wednesday was slow, and of the moderate quantity offered, 797 tins (mostly Seychelles) about half sold at lower rates, good to fine qualities being 1s. to 2s. cheaper. The following prices were paid:—

SEYCHELLES.—Good to fine chocolate, 7 to 8 inches, 21s. 6d. to 23s.; 7 to 7½ inches, 19s. to 22s. 6d.; 6½ to 7 inches, 17s. 6d. to 21s.; 3 to 6½ inches, 15s. 6d. to 19s.

TAHITI.—4 to 6 inches, 6s. 2d. to 6s. 3d.

MAURITIUS.—6½ to 7 inches, 21s. 6d. to 22s.; 4 inches, 17s. per lb.

AUSTRALIAN.—Brown, fair flavour, 7½ to 8 inches, 18s., and 5 inches at 15s. per lb.

Some parcels of Java vanilla of recent import (about 95 kilos.) have been sold on the Amsterdam market at from 4fl. to 8fl., according to quality.

NICOTIANA SOAP is prepared from an extract of waste tobacco of cigar factories. The extract is mixed with precipitated sulphur and a superfatted soap mass, and perfumed with oil of bergamot. It is brown soap containing 5 per cent. of tobacco extract and sulphur, and is used for skin diseases and scabies.—(*Pharm. Post.*)

London Drug Statistics.

THE following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses from February 1 to 28, 1900, and to the stocks on February 28. Their accuracy cannot be guaranteed.

	February		Stocks		1900	
	Landed	Delivd.	1900	1899	Imprtd.	Delivrd.
Aloes cs &c.	50	135	2,577	2,530	113	200
" " gourds	230	70	160	2,227	230	70
Anise, star cs	—	—	54	25	—	2
Balsams, csks &c.	126	229	310	318	214	328
Calumba-root .. bgs	—	35	170	631	1	56
Camphor pkgs	568	721	2,130	4,968	1,370	1,019
Carilamoms .. cs &c.	581	358	2,366	1,612	1,294	638
Cinchona pkgs	1,343	1,530	14,835	20,061	3,401	4,665
Cubeba bgs	—	34	1,708	1,800	—	36
Dragon's-blood .. cs	4	11	110	37	4	19
Galls pkgs	—	484	828	2,039	93	964
Gums—						
Ammoniacum ..	7	2	73	102	7	2
Anini & copal ..	798	2,615	7,476	16,035	2,460	5,607
Arabic cs	591	1,780	10,749	10,936	2,464	3,389
Asafetida ..	83	103	870	315	414	247
Benzoin	878	428	1,286	1,634	1,024	668
Damar cs	250	316	4,055	3,397	344	530
Galbanum ..	—	2	14	22	—	2
Gamboge	—	13	285	332	—	23
Guaiaicum ..	11	2	70	32	21	1
Kauri tons	182	285	1,534	685	369	628
Kino pkgs	13	9	44	68	14	8
Mastic cs	—	—	28	39	—	3
Myrrh, E. I. ..	—	29	312	377	51	49
Opibannu ..	928	832	2,536	3,675	1,919	1,056
Sandarac	69	38	690	653	447	165
Tragacanth ..	405	459	1,240	876	1,222	1,010
Ipecacuanha, Rio bis	16	69	140	45	49	111
" other kinds pkgs	42	34	103	33	72	80
Jalap bis	—	11	295	300	—	15
Nux vomica pkgs	—	—	13	135	—	—
Oils—						
*Anise cs	—	11	171	287	—	16
*Cassia cs	—	—	84	73	10	—
Castor pkgs	130	187	789	722	210	312
Cocoa-nut .. tons	72	81	374	243	257	175
Olive csks, &c.	304	164	1,117	719	508	430
Palm tons	3	1	6	5	3	4
+Quinine sulph. .. lbs	18,647	2,409	193,400	121,351	25,144	6,310
Rhubarb chts	22	148	1,151	1,496	116	255
Sarsaparilla .. bales	142	128	335	310	255	219
Senna bis &c.	635	491	2,216	1,142	2,023	1,435
Shellac, all kinds ..	6,173	4,318	43,272	47,032	9,642	7,989
Turmeric tons	50	40	217	204	116	57
Wax, bees' pkgs	334	398	1,352	1,493	648	817
" Japan .. cs &c.	—	182	350	543	115	262

* Stocks of aniseed and cassia oils lying at Smith's Wharf and Brewer's Quay are not included in this return.

+ Includes the quantity at Reel Lion, Bull, and Smith's Wharves; also the Docks.

NOTE.—A remarkably good business was done in benzoin last month, 428 packages being delivered, against 240 in January; the stock, however, has increased by 400 packages, but it is considerably less than that of previous years. Ipecacuanha was also in good demand, over 100 bales being delivered. The imports remain about the same as last month; stocks, however, are slightly less. Senna is not going off so freely as it was, but the recent arrivals missed the drug auction last week. Sarsaparilla was in better demand last month with increased deliveries of about 40 bales. There was also an improvement in the deliveries of rhubarb—148 cases, against 107 in January. Arrivals were on a more freer scale. There are only 13 packages of nux vomica in stock, which may be taken as an indication of the present scarcity. Jalap remains in the same neglected condition, with a moderate stock. An arrival of gourd aloes relieved the scarcity last month, and they are wanted. There is a good supply of aloes in cases, &c., for which the demand was slightly better than last month, 135 packages being delivered, against 65 in January. The stock of quinine in the warehouse is still increasing, 3,094,400 oz., against 1,941,616 oz. in February, 1898. The landings during February were 298,352 oz., and the deliveries 38,544 oz. The bulk of the asafetida in stock is a common quality for which there is little demand.

PROFESSOR WYNDHAM DUNSTAN was presented at the Prince of Wales's Levee at St. James's Palace on Wednesday.

Coming Events.

Notices of meetings are inserted free in this section if received by the Editor not later than Wednesday of the week before the meetings are held.

Monday, March 12.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M. Mr. E. S. Shepherd on "The Photography of Colour" (II).
Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 8.15 P.M. Evening meeting. Dr. J. C. McWalter on "The Dialysis of Drugs."

Tuesday, March 13.

Pharmaceutical Society of Great Britain, 17 Bloomsbury Square, W.C., at 8 P.M. Evening meeting. "Notes on the Commerce of Drugs," by Mr. E. M. Holmes.
Exeter Association of Chemists and Druggists. Annual supper at Wilson's Guildhall Restaurant, Exeter. Tickets (3s. 6d. each) may be had from Mr. H. Wippell Gadd, the Secretary, of the Association.
Royal Photographic Society, 66 Russell Square, W.C., at 8 P.M. Mr. E. H. Farmer on "The Illumination of Developing-rooms."
Bradford and District Chemists' Association, County Restaurant, Bradford, at 9 P.M. Mr. C. Greening will give a lantern-lecture on "The Pyrenes and Andorre."
Edinburgh Pharmacy Athletic Club, 36 York Place, Edinburgh, at 9.15 P.M. Annual general meeting.
Royal Colonial Institute, Whitehall Rooms, Hôtel Métropole, W.C., at 8 P.M. "A School of Tropical Medicine," by Dr. Patrick Manson.

Wednesday, March 14.

Sheffield Pharmaceutical and Chemical Society, at 8.30 P.M. Paper by a Member.
The Sanitary Institute, Margaret Street, W., at 8 P.M. Discussion on "Experimental Bacterial Treatment of London Sewage," opened by Professor Frank Clowes.
Edinburgh Chemists', Assistants', and Apprentices' Association. 36 York Place, Edinburgh, at 9.15 P.M. "Dispensing Notes and Queries," by William Duncan, F.C.S.
Manchester Pharmaceutical Society, Victoria Hotel, Manchester. "Pharmacy Notes," by Mr. J. H. Hoseason, and a discussion on Clause 2 of the Companies' Bill.

Thursday, March 15.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M. Short papers by Members.
Liverpool Pharmaceutical Students' Society, 6 Sandon Terrace, Upper Duke Street, Liverpool, at 8.30 P.M. Musical and social evening.
Chemical Society, Burlington House, Piccadilly, W., at 8 P.M. Papers to be read:—"The Vapour-densities of Dried Mercury and Mercurous Chloride," by Mr. H. B. Baker; "The Preparation of Pure Hydrobromic Acid" and "A new Sulphide of Arsenic," by Dr. A. Scott; "The Action of Iodine on Alkalies," by Mr. R. L. Taylor; "The Interaction between Sulphites and Nitrites," by Dr. E. Divers and Dr. T. Haga; "New Polysaccharides: Manno-galactan and Lævulomannan," by Mr. J. L. Baker and Mr. T. H. Pope.

Friday, March 16.

Glasgow Chemists' and Druggists' Assistants' and Apprentices' Association, 100 West Regent Street, Glasgow, at 9.15 P.M. Mr. T. S. Barrie on "The Distribution of Plants in Time and on the Earth."

Mr. Jesse Boot's latest advertisement bears the following heading:—

BOOTS, CASH CHEMISTS.

EVERY BRANCH UNDER THE MANAGEMENT
OF A CHEMIST QUALIFIED BY EXAMINATION OF
THE PHARMACEUTICAL SOCIETY.

At many of the branch shops of private Chemists no qualified Chemist is in charge. The following is an extract from their official Journal alluding to

"the condition of things actually existing at the present moment, when (private) registered Chemists carry on branch shops, even without qualified assistants."

—*Pharmaceutical Journal*,
24 February, 1900.

This appeared within a few days of the date quoted.